Clinical Lectures
ON
DISEASES OF THE EYE.

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ON THE USE AND ABUSE OF MYDRIATICS.

GENTLEMEN,—A short time ago a lady residing some distance from Nottingham asked my advice respecting an affection which she had described in a previous letter as a "slight cold in the eye"; she was at the time under the care of a surgeon of considerable repute, who evidently shared her impression as to the trivial nature of the attack, since he had prescribed nothing but counter-irritants and a slightly astringent lotion. I found on examination that the case was one of iritis, and suggested treatment accordingly; as my prescription, however, involved a dark room, bloodletting, and other *désagréments*, the patient decided to return home, and placed herself under the care of an ophthalmic surgeon, who, failing to effect dilatation of the pupil, endeavoured to counteract the evil influence of adhesions by excising a considerable portion of the iris. The lady recovered, but sight is impaired, the eye is to a certain extent mutilated, she has undergone an operation which has caused her much anxiety, and has lost most valuable time, all of which she might have been spared by judicious treatment in the first instance, *and* the timely employment of atropine.

When slight attacks of iritis, mistaken for surface irritation, are occasionally attended with such untoward results in the persons of well-to-do patients, while under the care of eminent general practitioners, it is easy to see that such cases are likely to be common enough among those who constitute the ordinary *clientèle* of the ophthalmic surgeon, both in hospital and private practice; indeed, scarcely a week passes but I am called upon to prescribe for patients suffering from the effects of adhesions, which, so far as my experience goes, might have been easily prevented. The young lady you have just seen is a case in point, constrained to pass her days and nights in stitching. She was seized a fortnight ago while at work with a violent pain in her brow, accompanied with inflammation and lacrymation of the right eye. She was visited by her medical attendant, who prescribed blisters, anti-neuralgic remedies, and a lotion which, from the pain she says it occasioned, must have been of an irritating nature. When I first saw her, the eye was much injected, the cornea turbid, and the iris, naturally blue, had lost its tint and lustre; the pupil was adherent to the capsule of the lens, and in places you noticed that it was bulged outwards from the pressure of the imprisoned aqueous humour behind it. By tapping the chamber, thus setting free some exudative matter, the adoption of energetic antiphlogistic treatment, and the assiduous instillation of atropine, we have succeeded in effecting dilatation of the pupil, and the patient is now in a fair way to recover; there remains, however, in spite of all that can be done, one tag of adhesion which may prove a source of future trouble, and which might just as well have been prevented. In these two cases, as in the majority of those that come under our notice, only one eye is so far affected; but it not unfrequently happens that such patients do not apply to specialists or special institutions until both eyes are involved in the destructive process, the pupil being firmly plastered to the capsule of the lens, its area occupied by dense membrane, and the sight so damaged that the sufferer has to be led about.

J. R——, the young man on whom you saw me perform iridectomy in both eyes, was one of these. He lives 200 miles away, was certified as hopelessly blind by the parish surgeon, and only came under my notice through the exertions of a benevolent clergyman. Two other cases, identical with this one, have been recently operated on, and there is one more which I hope to benefit by the formation of an artificial pupil, making four cases of actual blindness, the result of iritis injudiciously treated, which have come under my notice during the last five months. Would it be well, in view of these deplorable cases, to lay down a law that atropine should be employed as a matter of routine practice in all cases of inflammatory affection of the eyeball, on the ground that it could do no harm and might prevent adhesions? It would certainly simplify practice very much if such a rule could be adopted, but in point of fact atropine is as injurious in some cases as it is indispensable in others, and although, as we have seen, serious damage is done by the neglect of mydriatics, their employment is occasionally fraught with danger and followed by disastrous consequences. In fact, I have at the present time three patients under treatment whose sight has been injured, and one in which it has been destroyed, by the injudicious employment of this valuable remedy. The patient in the women's ward on whom I operated ten days ago is one of these. She is fifty-six years of age, and has been suffering for months past from occasional dimness of vision, and now and then the appearance of a halo round the flame of artificial light. These symptoms, although the portents of glaucoma, were only transitory in character, and she might have gone on long enough *in statu quo* but for an unfortunate accident. She complained to her medical attendant, who was prescribing, she says, for a bilious attack, and he applied some drops, which she tells us, in that curious phraseology which patients sometimes adopt, "expanded the pulp of her eye." Intense pain followed and sight was speedily abolished, so that when I first saw her she could only just perceive the light—in fact, glaucoma had been developed by atropine in the right eye, the left was actively sympathising, and the patient had not slept for nights. I at once excised a considerable segment of the iris; all the symptoms ceased as if by magic, she recovered rapidly, and useful though somewhat impaired vision has been restored.

Now these cases are by no means so rare that we can afford to ignore them; in a large ophthalmic practice they are constantly cropping up—indeed, they are more common than they used to be, because the new race of surgeons employ atropine more generally than their predecessors. In the case just quoted the drops were prescribed more by way of doing something, than as a remedy deemed necessary for the treatment of the case; but it not unfrequently happens that cases of inflammatory glaucoma are mistaken for iritis, and positively ruined by the instillation of atropine used with the very best intentions. The old lady from N——, on whom I performed iridectomy in both eyes three weeks ago is a case in point; she had slight redness of the eyeballs, slight pain, and one or two attacks of vomiting. These symptoms were not thought very much of at the time, and although the condition of the sight, which was very much impaired, ought to have occasioned alarm, this was looked upon as a mere symptom due to a bilious attack, and she was assured that vision would speedily return. At this juncture a young practitioner assisting the gentleman in attendance saw the patient, pronounced the case one of iritis, and applied atropine; all the symptoms were speedily aggravated, and although the pain, vomiting, and general symptoms have passed away since the performance of iridectomy, there is very little sight at present, and very little prospect of any to come. Last week, among my private patients was a gentleman sent to me with a letter from his medical attendant stating that he had been suffering from rheumatic iritis, which had been treated by atropine. The case was one of glaucoma, and I was obliged to operate immediately—a proceeding which the patient did not anticipate, and for which he was by no means prepared. I need not multiply instances; enough has been said to show that the general practitioner who treats these cases of eye disease, unless exceptionally well informed, is beset by dangers—a Scylla and Charybdis, in fact: on the one hand, blindness from adhesions if atropine is neglected; on the other, glaucoma if it is employed in unsuitable cases. What is to be done? Specialists are not likely to make mistakes, but such cases do not come under the notice of specialists in the early stages, and in none is it more necessary "to stop the beginning."

> "Principiis obsta, serò medicina paratur
> Cum mala per longas invaluere moras."

It behoves us, therefore, to formulate some general rules for the guidance of the medical attendant, who is so frequently responsible for these cases in the early stages. What shall they be? Well, age is an important consideration. Young persons are not as a rule subject to glaucoma, although they not unfrequently suffer from iritis. I do not say young people never have glaucoma; indeed I have a case of cupped

disc with tension under treatment at the present moment occurring in a girl of eighteen; and last week I had to excise the eyeball of a young gentleman, the subject of congenital dislocation of the lens, for glaucoma absolutum, whose symptoms had been greatly aggravated by atropine. But as a rule young people are not likely to suffer from glaucoma, and the employment of atropine with patients under thirty, forty, or even fifty, is comparatively safe. But you will say, Patients upwards of fifty years of age suffer from iritis and require mydriatic treatment. To which I reply, Certainly. The lady whose case I quoted at the commencement of this lecture was one of these. It has been suggested that only very weak solutions should be employed, and no doubt the danger may be in this way somewhat diminished; but then weak solutions will not break up adhesions. To set the iris free you require strong solutions frequently applied; moreover, feeble dilutions are by no means devoid of risk. I have seen glaucoma aggravated by very weak solutions of atropine, and the same remark applies to homatropine, which it was hoped might be employed with safety; in fact, I have at the present time a lady patient under treatment in whom glaucoma was induced by a 1 per cent. solution of homatropine, and I note a similar case is recorded in a recent number of the *Wiener Med. Woch.*

It has been suggested by Mr. Hodges, of Leicester, who read an excellent paper on this subject before the Midland branch of the British Medical Association last year, that the medical attendant should use his fingers, and by palpation ascertain the condition of the eyeball as to tension before dilating the pupil; but, as I remarked at the time, a certain amount of *tactus eruditus* is necessary to do this in any case, and when the eyeball is small, the orbit deep, the eyelid thick and flabby, or the patient intractable, it is by no means easy to arrive at a just conclusion, especially when the case is not a very decided one, and the subjective symptoms not very marked. Moreover, in cases of simple glaucoma, tension is not increased, or only very slightly increased; but you will say, There is no inflammation in simple glaucoma, no suspicion of iritis, no fear of adhesions; then why use atropine at all? Why, indeed? Nevertheless, it is frequently used in these cases by practitioners oblivious of the maxim, *Primum non nocere*, simply by way of doing something, or in order to clear up the diagnosis. The patient complains of dimness of vision; to the unpractised eye there is an appearance of opacity; the case is supposed to be one of cataract, and atropine is used either to improve sight by dilating the pupil or facilitate ophthalmoscopic examination, often with fatal effect. I remember a case of this kind occurred at this institution when it was first inaugurated. The patient was an aged female suffering from simple glaucoma; atropine was used through some mistake, and the symptoms were so much aggravated that she declined all further treatment on the ground that "them drops had blinded her." Are there no means of dilating the pupil without incurring these terrible risks? Have we no mydriatic that is safe? Are not some safer than others? These are questions which it is at present very difficult to answer. I am, however, inclined to think that cocaine will be found the safest mydriatic to employ in a doubtful case. Certainly it reduces the tension of the normal eye in a most marked degree—a fact we have frequently demonstrated during the operations for cataract performed under its influence; whether its effect will be innocuous, beneficial, or otherwise in glaucoma, however, remains to be proved. Any way, it will be long before medical men in general practice will have cocaine at hand to use in a doubtful case. Meanwhile what advice can we give to the attendant who is called upon to treat a case of eye disease, which may be glaucoma, which may be iritis, or which may be simply surface irritation? Well, the best advice I can give in such cases, if there is the least doubt, especially if the patient is past middle life, is for the attendant to get rid of the responsibility. Medical men as a rule remain long in one place; their patients are their neighbours, friends, and acquaintances, often of years' standing; and it is a grave misfortune for a practitioner to have in his immediate neighbourhood—next door as it were—one who believes, rightly or wrongly, that his worst misfortunes are due to his attendant's want of skill, lack of interest in the case, or failure to appreciate peril. I therefore counsel, in view of the life comfort of the patient, and with regard to the reputation of the practitioner, that what is sometimes called "better help" should be called in. There are ophthalmic surgeons now in most towns; and it is better that those whose backs are broad should bear the burden, if burden there be to bear. For the successful treatment of an odd case or two of this kind can do no one any good; while failure involves loss of reputation, more or less merited reproach, heart-burnings, and an uncomfortable feeling that you have not done your duty to a friend and client when his dearest interests in life were at stake.

ON A SPECIAL FORM OF NUMBNESS OF THE EXTREMITIES.

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MANY disorders which seem trivial in the out-patient room become of great importance in private practice, where they are measured by a very different standard. Moreover, many usually trivial phenomena may, under certain circumstances, assume an overwhelming gravity of appearance, and, when they are misunderstood, may lead to serious errors of judgment and practice. For example, purely functional neurotic vomiting is by no means uncommon, and, in my experience, is usually neither formidable nor intractable. Some persons vomit whenever their nervous stability is a little shaken. A medical friend told me lately that he always used to vomit before his examinations, and that even now a summons to an anxious case of labour immediately empties his stomach; yet this curious symptom has never caused him any special inconvenience. A short time ago I saw in consultation with Mr. J. W. Moore, of the Moseley-road, a gentleman in whom neurotic vomiting and diarrhœa, combined with severe enteralgia, had assumed a most formidable appearance. He had been for months totally incapacitated from attending to his business, was confined to his bed, and in his own opinion and that of his friends his life was in danger. The diagnosis of neurotic vomiting was arrived at from the history of the case, the absence of any evidence of local disease, and the general aspect and manner of the patient; in that view Mr. Moore, who had known him a long time, quite concurred. By careful administration of small quantities of solid food at short intervals, without the use of opiates or astringents, he made a nearly perfect recovery, when business trouble threw him back into his previous condition, and he slowly recovered from the effects of that shock. He is now (Sept. 1st) quite well.

The treatment of functional disorders is very simple, but nothing short of certainty can give us the necessary confidence to hold on the right course, in spite of appearances, so that it is our duty to study these functional conditions in their minor manifestations as closely as we can. Holding this opinion, I trust to be excused for directing attention to a very common, but little studied, neurosis, which in its minor forms occurs daily in every medical out-patient department, but which every now and then assumes a more serious aspect, and has on more than one occasion within my own knowledge given rise to serious errors of diagnosis. I allude to a peculiar numbness and tingling, very similar to that produced by pressure on a nerve, occurring sometimes in one, sometimes in both, upper extremities; at other times it is present in both upper and lower extremities, or in the upper and lower extremity of one side of the body. This sensation of numbness and tingling is more or less painful; it is accompanied by transient loss of power; is relieved by rubbing; occurs distinctly in paroxysms; is most apt to occur at night, when it frequently disturbs sleep; is sometimes said to be accompanied by blueness and coldness of the hand and narrowing of the calibre of the radial artery. In its minor forms it is more common in women, but the most severe cases I have seen have been in men; it occurs with about equal frequency in either arm; it is less frequently bilateral; while the paraplegic and hemiplegic forms have come under my notice still less commonly. Most of my patients have been persons past middle life, and I have never met with it in anyone under twenty-five years of age. It is, in my experience, distinctly connected with disordered stomach, and readily yields to treatment. Though generally met with as an epiphenomenon, in cases where other complaints take precedence of it, sometimes it is the main

trouble for which medical advice is sought. The following cases are illustrative.

CASE 1.—Mrs. F——, aged fifty-two, consulted me respecting severe numbness of the left hand, which came on during sleep, and had so much disturbed her rest that she had not enjoyed a good night for a fortnight. Ten years ago she was troubled in a similar manner. The catamenia ceased two years ago. She was healthy-looking, stout, and short. I could not elicit any symptom of dyspepsia. Her tongue was clean, and her bowels acted regularly. Nevertheless, I ordered her one drachm of compound rhubarb powder in six ounces of peppermint water, a wineglassful to be taken three times a day before food; also one grain of subchloride of mercury with three grains of white sugar, in form of powders, to be taken on alternate nights. A week later she told me that she had had three good nights. I then added ten grains of bromide of potassium to the mixture and omitted the calomel. In another week she was quite well.

CASE 2.—A. B——, a widow, aged fifty-three, complained of pain between the shoulders and numbness of the right arm. This numbness was worse at night, and woke her up. Lately it had troubled her in the daytime as well, so that she had been unable to do any work for the last three months. Her tongue was furred and her bowels were confined; she complained of loss of appetite, pain after food, and a bad taste in the mouth; there were no physical signs of disease in the stomach. She had passed the menopause five years ago. After a short course of treatment of the same kind as in the last case, she recovered completely.

CASE 3.—C. D——, middle-aged clergyman, who had removed from a busy city parish to the quiet duty of a country parson. He was stout, florid, short, of sedentary habits, taking little exercise beyond his garden, eating heartily, and drinking freely, but not at all to excess, of malt liquor. When I saw him his tongue was coated with a thick brown paste, his breath was very offensive, and he complained of headache, irritability, and especially of numbness of the right arm and hand. The last symptom troubled him, as the hand became blue, and the pulse was, according to his account, smaller than at the opposite wrist during the attack. He had been told by a medical man that he was suffering from organic disease, and that no insurance company would accept him. There was no evidence of intrathoracic disease, and under better management all the above symptoms passed away, and for some years he has enjoyed the best of health.

The only two writers who have definitely discussed this affection are Dr. Ormerod[1] and Dr. Wharton Sinkler.[2] Dr. Ormerod says: "The symptoms are remarkably definite in character. They occur in women, usually about the climacteric age, and begin in the night. On waking the patient has a feeling in the hands and arms (commonly of both sides) of numbness, deadness, 'pins and needles'; sometimes there is actual pain severe enough to wake her. There is also loss of power; the hands and arms become useless, and she cannot hold things. This may so far predominate that the patient comes to be treated for a supposed paralysis. Sometimes also the patients say that the hands swell, the veins swell, &c., at the time. The symptoms pass off in a little time, and rubbing suggests itself as a natural remedy. But occasionally they manifest themselves in the daytime also, and then principally when the patient sets about her ordinary work—washing, scrubbing, needlework, &c." Dr. Ormerod does not clearly recognise its occurrence in men, nor does he connect it with any constitutional state except generally with the menopause. For treatment he says bromide of potassium has proved useful in some cases.

Dr. Sinkler has met with it usually in women at about the change of life, but he has also observed it in men. He has seen it affect the lower as well as the upper extremities. He does not speak definitely as to its cause, some of his patients being overworked, others anæmic, rheumatic, &c. He regards the symptom as directly dependent upon hyperæmia of the nerve-trunk or a portion of the cord, and he states that women at the change of life are liable to such hyperæmias. We all know that climacteric women are liable to flushings of the face, but can we infer from this that they are also liable to limited hyperæmias of portions of the cerebro-spinal axis or nerve-trunks? This sort of pathology is surely rather worse than a candid agnosticism. For treatment he recommends ergot, which fits in very well with his theory.

Dr. Handfield Jones[3] has included examples of this affection in the cases recorded in his chapter on Brachial Neuralgia; but he has not recognised the distinction that exists between numbness and true pain in the course of a nerve. In order to distinguish clearly between the two, the following case of brachial neuralgia may be quoted.

CASE 4.—L. M——, aged fifty-eight, consulted me for a severe pain, which, she said, started from the middle finger of the left hand, and shot up to the elbow and under the left breast. When she turns her head quickly she feels a tingling on the outer part of the left forearm, and that part is sore to the touch. She stated that she had had rheumatic fever three times, but had never had gout, though the father was very gouty. She was stout and well developed, of active habits, living well, but moderate with respect to alcoholic drinks. She had learned by experience that she could not drink champagne without bringing on a severe attack of pain. The heart appeared normal, tongue clean, bowels apt to be irregular, and she was subject to "bilious attacks." This was regarded as a neuralgia of gouty origin, and after the use of small doses of colchicum and alkalies it entirely disappeared.

Dr. Weir Mitchell[4] appears to have recognised this condition, to which he gave the name of "nocturnal hemiplegia," though he admits that "brachial monoplegia" is its most common expression. He says very little about it, and in view of the very temporary loss of power the name given by him is not very appropriate.

I have already said that, as a rule, the symptom is not one prominently complained of, but may be frequently discovered if looked for. In the following case, where all four extremities were affected, no complaint at all was made till the question was asked.

CASE 5.—Miss Y——, aged thirty-five, consulted me for occipital headache, giddiness, and loss of appetite. Her tongue was coated with a thin whitish paste, her bowels were confined, and there was a sub-icteric tinge of the conjunctivæ, with tenderness in the region of the liver. There is more than a suspicion that alcoholism is the main source of this lady's trouble, the further progress of which need not detain us. But on inquiry at her last visit I learned that she suffered "dreadfully" from numbness, especially in the right arm and hand, but to some extent in all four extremities.

In support of my opinion that this affection is mainly dependent upon stomach disorder, I may say that, while recently suffering from sub-acute gastric catarrh, the sequela to a severe attack of catarrhal pharyngitis, I was disturbed twice at night by numbness, tingling, and loss of power in the right arm. On the first occasion I thought pressure might have had something to do with it as I was lying on the right side; but on the second occasion the arm was certainly not pressed upon. With respect to pressure, there can be no doubt that in persons liable to this affection a small amount of pressure seems to have a very decided influence in determining the attacks, but they are by no means dependent upon this cause. On the other hand, I can attribute very little influence to the menopause. We all know that women as they advance in life suffer a good deal from dyspepsia, and we are all familiar with the various forms which neurasthenia takes in climacteric women. The cases I have given, however, do not support the view that it is by any means specially to be found in connexion with the menopause. Case 1 is the sole example in which this relation exists at all; but we have the patient's own statement that ten years previously—that is, eight years before the menopause—she had suffered in the same way. I have seen a lady lately who complains of this symptom, and in whom the menopause was passed thirteen years ago. Its occurrence in men, who have no such well-marked functional change, is another strong argument against this view; but in them, as in women, it is most common about and after middle age.

[1] On a Peculiar Numbness and Paresis of the Hands. (St. Bartholomew's Hospital Reports, 1883.)

[2] On a Form of Numbness, chiefly of the Upper Extremities. (New York Medical Journal, July 26th, 1884.)

[3] Studies in Functional Nervous Disorders, p. 550. (John Churchill and Sons. 1870.)

[4] Diseases of the Nervous System, p. 171. (Philadelphia: Henry C. Lea's Son and Co., 1881.)

DEPUTATIONS are, we learn, about to wait upon the heads of city firms to urge the necessity of providing sitting accommodation for female "out-door hands."

THE SURGICAL TREATMENT OF GALL-STONES.

BY LAWSON TAIT, F.R.C.S.

(*Concluded from p. 380.*)

IN cases where patients suffer from numerous gall-stones the gall-bladder is never distended, at least has never been so in my experience, to anything like the extent or for the length of time which I have found it to be in the case of large solitary gall-stones. The reason of this is not difficult to find. In the first place, in the case of numerous gall-stones they are nearly always small, although an occasional large one is found amongst them. Their irregular size is such as to facilitate their passage through the duct, and also to permit the escape of bile alongside of them whilst they are being passed. They are not consequently lodged for any length of time in the duct, and they do not prevent the flow of bile into the gall-bladder permanently, as is done by a large solitary calculus when impacted. When we operate, therefore, in cases of small numerous gall-stones, we find them lying in bile, the gall-bladder to a large extent continuing to perform its functions. Before the operation a tumour formed by the distended gall-bladder may be discovered easily one day, and may have entirely disappeared before the next examination. This phenomenon I have repeatedly observed in three of my cases of cholecystotomy for numerous gall-stones. The distress which the general acuteness of the symptoms causes in these cases is infinitely greater than in those of large solitary stones, for the patient may be found to pass small ones in large numbers, and with great frequency, each stone causing terrible agony.

I recently operated upon a lady from Bristol who for six years had a series of attacks of gall-stone colic, which left her very short intervals for repose. During that time thirty-six stones were recovered from the fæces, and doubtless these constituted only a part of the total number passed. When at last, worn out with suffering, she came to me for surgical relief, I operated, and found twenty-two stones in the bladder. During the whole of this protracted suffering jaundice was present on the first attack only, at a time when she passed a stone barely 3·2 grains in weight, one of the smallest she had ever passed. This leads me to say that the common idea that jaundice is a frequent symptom of gall-stones must be entirely erroneous. It most assuredly never has been present in the cases upon which I have operated for large stones impacted in the neck of the gall-bladder; and for the very evident reason that as the bile in such cases is not allowed to enter the bladder, but is obliged to pass freely into the duodenum, there has never existed any reason for the production of jaundice. In the case of a small stone passing through the duct, the greatest amount of distress seems to me to exist during that time when the stone is engaged in dilating the cystic duct. Jaundice can occur only during the time when the stone is resting in or passing through the common duct. This duct is shorter and wider than the cystic duct, and the distress occasioned by a stone passing through it is most certainly much less than that occasioned by the passage through the cystic duct, and after a first stone is passed through the common duct all its successors seem to follow with great ease. We have therefore, in my experience, the occurrence of jaundice in the passage of gall-stones absolutely limited to the passage of the first stone through the common duct.

The operation for the relief of cases of multiple gall-stones differs considerably in its details from the operation in cases of large solitary gall-stones. In the first place, as the gall-bladder is not distended, the diagnosis is not quite so certain, and when the abdominal section is made the gall-bladder is not so easily found. After it has been found and pulled out, it does not require to be emptied in the same way and with the same care, and when opened the bile will be found to flow continuously out of it and to require great care to prevent it flowing into the abdomen. A scoop or a pair of forceps will easily remove the great bulk of the stones from the bladder, but we never can be sure that we have removed them all. There may be one beyond the reach of the finger or of instruments, of small size, yet sufficiently large to form a serious obstruction to the passage into the duodenum of the contents of the gall-bladder after the biliary fistula is closed. One certain fact is this, that the fistula closes readily enough, but it will remain closed only until the secretion of the mucus in the gall-bladder has so distended the cavity of the organ as to begin to drive the gall-stone onwards. It then becomes a question as to how long the wound will remain closed, and how far the bladder wound can sustain the pressure required to force the gall-stone onwards. The wound yields first and most readily, and then we have the wound opening at intervals to give vent to a large quantity of clear mucus, which has extended the gall-bladder. In one case I was unfortunate enough to have left a stone close by, or perhaps almost at the junction of the cystic and common ducts, so that when the fistula closed the secreted mucus forced the gall-stone into the common duct, past the union of the cystic and hepatic ducts. The result of that, of course, was that the whole of the bile of the patient's system passed backwards into the gall-bladder and out through the biliary fistula. I hit upon a somewhat novel idea, and crushed the stone from outside the duct, and this I accomplished satisfactorily, as narrated in the *British Medical Journal* of July 12th, 1884, performing a sort of cholelithotrity.

It may be well to describe somewhat in detail the method of operating so far as is common to the two kinds of cases; and, indeed, the proceeding is a very simple one. The details have been now completely elaborated, and every departure from them so far has only led to disasters. I have now performed the operation sixteen times, with uniform success, whilst the variations from the proceeding I am about to describe have been disastrous to the extent, in the hands of others, of between 50 and 60 per cent.

Having felt the position of the hepatic notch, I make an incision from the margin of the ribs over it directly, or almost directly, downwards, cutting carefully through the various textures until I reach the peritoneum. This is carefully seized by two pairs of forceps and pulled backwards, an opening having been made between the two pairs of forceps large enough to introduce my forefinger. With this I search for the gall-bladder; and sometimes I have experienced considerable difficulty in finding it. Generally speaking, the stones can be felt in the bladder before it is opened. In two cases out of the sixteen I have not found any gall-stones; in one case a mistake had been made, and in the other the disease was in all probability malignant. The details of these cases have already been published. Having found the gall-bladder, I cautiously bring its fundus towards the wound and seize it by a pair of forceps. If it is distended, it is first of all tapped and emptied; if it is not distended, or if it has been emptied, I lay it open by scissors or forceps to an extent sufficient to get a finger in; the edges of the wound in it are then seized by forceps and any bleeding points secured. My finger then explores the bladder, and by means of forceps or scoop all the stones within reach are removed. A continuous suture is then applied so as to accurately close the peritoneum by uniting the edges of the wound of the abdominal wall to the edges of the wound of the gall-bladder, the two peritoneal surfaces being carefully adapted to each other. An indiarubber drainage-tube is then placed in the wound, and this is kept in for six or seven days, until it is possible to remove the stitches. If the stitches are removed along with the drainage-tube, the wound speedily heals; and if all the stones have been removed, the patient is already cured. If the wound reopens and bile discharges, or mucus from the gall-bladder, the remaining stone which occludes the passage must be dealt with, either by crushing from the outside of the duct or in some other way as circumstances or the ingenuity of the operator may suggest. I certainly vouch for this, that so far as my cases have gone it is not known that they have any tendency to the reproduction of the gall-stones. Certainly they have not given any indication of it so far. I would point out that even if this did happen, an incision through the skin, probably only half an inch deep, over the site of the old scar, would reach the gall-bladder without opening the peritoneum at all, and any reaccumulation of gall-stones might be removed without the slightest difficulty or danger. I need not point out that in the event of the operation being performed which is suggested as the alternative to that which I have described—namely, cholecystectomy—after an accumulation occurred in a case of numerous gall-stones, as actually did occur to myself where a small gall-stone lodged beyond the junction of the hepatic and cystic ducts, the operation in which the gall-bladder was

removed would be of necessity fatal, because all the secretion of bile would find its way into the peritoneum. The detailed results of this operation of cholecystectomy have not been published, and what I know of them is only by hearsay, but I have a strong suspicion that the deaths in two of the cases are to be attributed absolutely to this cause. At any rate, the mortality of cholecystectomy is 50 per cent.; the mortality of cholecystotomy has not yet appeared.

Here I should like to say a word as to the method of dealing with statistics, which has become only too common within recent years, since statistics have been insisted upon in the realm of abdominal surgery. I certainly am very far from objecting to statistical information; but such information, to be of the slightest value, must be complete, and it must be accurate. Alongside of it, and at the same time, must be furnished any qualifications which may render it more or less valuable. When speaking of the statistics of an operation, the mortality of a particular proceeding must not be confused with the mortality of a particular operator, still less with the mortality of a group of operations gathered indiscriminately from all kinds of sources. Thus nothing can be more fallacious than such a group of figures as I recently saw from the pen of a well-known American writer, who asserted that the mortality of a particular operation, with which my name has been very intimately associated, was something like 25 per cent., whereas the real mortality of the operation is 2 per cent. He arrived at his conclusions by taking about 220 or 240 operations from the practice of nearly forty operators, each of whom had operated in from six to ten cases. It is perfect nonsense to call this the mortality of the operation; it really was the mortality of some thirty or forty men bungling along in the early part of their experience. No man is born with an intuitive knowledge as to how such operations are to be performed. It need only be said that every surgeon in his early experience will have a mortality necessarily higher than when his experience is ripe in any particular operation. In the statistics which I am now alluding to the mortality was due, not to the operation, but to the inexperience of the operators. Nothing could be more startling than to contrast results like these with a similar number of operations taken from the records of three surgeons who could contribute between them nearly 400 cases. So it is with the operation of cholecystotomy. It has recently been condemned in a table composed of some twelve or fourteen cases, not any two of which have been performed by the same man. The mortality of such a table, again I say, is not the mortality of the operation, but that due to the mistakes of the operators. The true mortality of the proceeding is to be judged from a fairly large group of cases in the hands of one particular surgeon, and the largest group which can be yet offered is that in my own practice, of sixteen cases without a death. I therefore have no hesitation in saying that this operation is one in which the mortality is extremely low, very much lower than the mortality of the disease which it is proposed to cure by its means.

There remains to be spoken of only one other feature of this modern triumph of our surgical art—that is, it has become the fashion of late to apply to this proceeding a canon of criticism which, as I have often said before, is not applied in general surgery. We who practise abdominal surgery are told that we have no business to perform these operations, save in cases where life is absolutely threatened; that, in fact, we alone in the ranks of the medical profession should suspend our beneficent powers for the relief of suffering, and step in only with the hope of resuscitating a semi-moribund patient. I turn round and ask my friends, the general surgeons, What about plastic operations? Why should osteotomy for deformity ever be performed? Why should the tendons for club-foot ever be divided? The mortality of osteotomy is not nearly so low as the mortality of many of the operations which are performed by us for the relief of agonising suffering in the abdomen. Certainly there is neither pain nor danger to life in the legs of a weakly child who is deformed, nor is there any justification upon such a line of argument for the division of tendons, nor for the performance of plastic operations for the remedy of deformity. Such a line of argument is, in fact, so perfectly foolish that it requires only to be slightly studied to be completely abolished. Our functions are not those merely of the life-saver; our greater and much more successful function is the relief of pain and suffering. Amongst all the many advances which modern abdominal surgery has seen, I claim that there is none so certain, nor so free from risk, nor so brilliantly successful as the surgical treatment of gall-stones.

PERNICIOUS VOMITING OF PREGNANCY.

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ALTHOUGH pregnancy cannot be called a disease, yet it produces such profound changes in those physiological processes which by working harmoniously constitute health, that it is a very important predisposing cause of many dangerous diseases. Perhaps the most important change occurring in pregnancy is the cloudy degeneration of the glandular organs. It has recently been shown that in normal pregnancy the great glands of the body, such as the liver and kidneys, undergo what is known by pathologists as cloudy swelling; the gland-cells lose their hyaline appearance and become cloudy or granular from the precipitation in their substance of minute albuminous particles. This change is almost identical with the first stage of the acute fatty degeneration of Bright'e disease and of acute yellow atrophy of the liver. Thus we have in normal pregnancy the first stage of these most important diseases already established. If, under the influence of some exciting cause, this change proceeds further and passes into acute fatty degeneration, we get the conditions which produce eclampsia, or the pernicious vomiting of pregnancy, according as the brunt of the disease falls upon the kidneys or upon the liver. What these exciting causes may be it is difficult to surmise; authors have searched for them in the uterus and its surroundings, and have imagined, some that a uterine flexion, others that hyperplasia and chronic congestion of the cervix are the chief causes, but none of these conclusions are based on sufficiently convincing observations or arguments. Probably the natural or physiological vomiting of pregnancy has some close causal relation with the altered nutrition described above; it seems, however, highly probable that the so-called pernicious or uncontrollable vomiting of pregnancy is symptomatic of acute fatty degeneration of organs affecting mainly the liver. The following case (for permission to publish which I am indebted to the kindness of Dr. Matthews Duncan) illustrates many of the clinical features of this disease.

M. M——, aged twenty, was admitted into St. Bartholomew's Hospital on April 16th, 1885. She had been married twelve months, and had had no children nor miscarriages. Her catamenia began when she was thirteen years old, and had been quite natural; the last menstrual period terminated at the end of November, 1884. Towards the end of December she began to suffer from sickness. At first she was sick every morning from 8 A.M. till 11 A.M., and brought up everything she took. In January the vomiting became more severe, beginning at 2 A.M. and lasting all the morning. From February until her admission into the hospital the vomiting had been almost continuous, and had prevented her from getting any sleep. She stated that her bowels were usually much constipated, but that she had sometimes noticed her motions to be loose and black. On admission she looked very ill; she was much emaciated; her eyes were sunken in their sockets, and surrounded by dark halos; her face wore an aspect of anxiety, and gave evidence of great suffering; the conjunctivæ were slightly jaundiced, but hardly any bile-pigment could be recognised in the skin; the pupils were natural, and the ophthalmoscope revealed no abnormal appearance; the pulse, respiration, and temperature were natural; the heart and lungs were healthy; there was no tenderness in the region of the liver, nor was the hepatic dulness in any way altered. The hypogastrium contained a tumour having the characters of a natural five months' pregnancy, and on auscultation the fœtal heart was easily heard. Vaginal examination discovered nothing abnormal. About 40 oz. of urine, of specific gravity 1015, and with acid reaction, were passed in the twenty-four hours; it contained a trace of albumen and some bile-pigment; no casts could be discovered, and there was no

evidence of the presence of leucin or tyrosin. Her mental condition was unimpaired. She was ordered to be fed with iced milk and soda-water, and to take an effervescing mixture of citrate of potash. On April 18th she was much better, had only vomited twice since admission, had kept down a considerable quantity of milk, and had slept fairly well; but at 6.30 P.M. her mental condition became suddenly changed: she commenced to shout at the top of her voice and to throw her arms about violently. This seizure did not at all resemble an epileptic fit, but was more like the performance gone through by a woman during an hysterical attack; it lasted a few minutes and was followed by an interval of calm, during which she seemed quite confused, talked unintelligibly, and would not answer when spoken to. She had a second attack ten minutes afterwards, exactly resembling the first. A draught of chloral and bromide of potassium was administered, after which she remained quiet and was rather more collected until midnight, when she had another similar attack, after which she remained in a semi-delirious state, but could be temporarily brought to consciousness. At 3 A.M. on April 19th it was determined to induce miscarriage, and a laminaria tent was introduced into the cervix. As she continued to show a tendency to be convulsed, she was kept partly under the influence of chloroform. The labour went on naturally, and the fœtus was born at 7.30 P.M. There was considerable post-partum hæmorrhage; the liquor amnii contained bile; the fœtus was natural. She became conscious at 1 A.M. on April 20th, and at the time of my visit, although she seemed much exhausted, recognised everybody and was quite rational. Shortly after the introduction of the tent into the uterus, the pupils became much contracted and did not react to light. This condition could hardly have been due to morphia, for although she was ordered one-sixth of a grain subcutaneously, about half of it escaped from the syringe; moreover, on the following day the pupils were quite natural. She made an uninterrupted recovery, but the urine remained bile-tinted for four days. For several days after the miscarriage large quantities (viz., from 70 to 100 ounces per diem) of urine, of low specific gravity, were passed; it contained no sugar. She promised to come and see me should she again become pregnant.

I have thought this case worth publishing because the disease is a rare one, and therefore the number of recorded cases is but small. The three chief symptoms of the disease are vomiting, convulsions, and various hæmorrhages. In this case the first two symptoms were typically present, but the third was absent. She had no hæmorrhage of any sort whilst under observation. The vomiting was very severe, but ceased almost immediately after admission, although no very active treatment was directed towards it. Had some new drug been given, it would very probably have gained great credit for stopping it. But although the vomiting ceased, the disease was not cured, for convulsions set in, and the patient would certainly have died had not abortion been induced; in fact, this is the only procedure which can in any way be said to "control" the vomiting of pregnancy. Although this case does not throw any new light upon the nature of the disease, yet it adds one to the list of recorded cases, and may therefore, I hope, be considered of some value.

ON THE TREATMENT OF SOME CHRONIC FORMS OF SUPPURATION FROM THE MALE URETHRA.

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CHRONIC suppurations of the male urethra probably include some of the most troublesome cases amongst the minor affections of the urinary passages. Some years ago I described[1] a form of syringe which had been found serviceable in irrigating the urethra and curing a considerable proportion of cases which were included under the somewhat comprehensive name of gleet. An extended experience of this treatment shows that a certain number of instances will be found where it has proved as useless as others to which the urethra had been submitted.

A careful analysis of cases of chronic continued or intermitting suppuration shows the existence of at least two conditions under which such a discharge is maintained: (1) chronic urethritis where the line and relations of the urethra are in no essential degree altered; and (2) cases where the urethral walls have been rendered more or less pouched, or where localised suppurations out of the line of the urethra exist—as, for instance, in connexion with the larger lacunæ, Cowper's glands, or their ducts, or even with the prostate. In the former, and by far the commoner, class of cases the affection seldom fails to disappear under the employment of those measures which secure a thorough medicated irrigation of the whole length of the urethra. It is, however, the second class of cases where the maintenance of the suppurative process is rather peri-urethral than urethral that I wish here to dwell upon. Time will be saved by my briefly quoting a case in point.

A gentleman, aged thirty-four, consulted me early in 1884 for an intermitting urethral discharge of a purulent character, at times excessive, and resulting from a gonorrhœa contracted four years previously. This discharge, which was distinctly purulent, had resisted all kinds of internal and external treatment. He had used astringents of all sorts; an injection consisting of a grain to the ounce of each of the four sulphates—viz., iron, copper, zinc, and alum—seemed to control it best, but without curing it; a deep urethral injection of a strong solution of nitrate of silver was used under the direction of another surgeon, but without benefit; whilst, as a last resource, internal urethrotomy had been performed for the purpose of removing a slight contraction, but without any better results. I have specially referred to these three methods of treatment, which were successively tried in this case, as representing the most potent as well as probably the most effectual means of treating certain obstinate forms of ordinary gleet. With this history before me, I came to the conclusion that the case could not be regarded other than as one of an exceptional character. All that I could detect abnormal was a slight contraction behind the bulb where the internal urethrotomy had been performed some weeks previously. To repeat this operation, even upon the lines which have been so carefully laid down by Otis, seemed to offer no guarantee that a better result would be obtained. It appeared to me that the urethra in some part was of the nature of a suppurating sinus, through which urine flowed out and injections flowed in, and which could neither be efficiently drained nor irrigated. In the case of the patient I have referred to, his life had been rendered most miserable for four years by the constancy of this discharge; he had run some considerable risks to get rid of it; he had the tolerably sure prospect of a stricture forming, and after what had been done but little hope of getting rid of his ailment. Under these circumstances I did not hesitate to apply to his urethra those well-recognised principles of surgery which are generally applicable to suppurating sinuses—to place the canal at rest for some weeks, and to prevent urine coming in contact with it. I opened the membranous urethra on a grooved staff at the apex of the prostate, and put in one of my smaller bladder-tubes with rubber tubing attached, through which the urine was drained into a vessel by the patient's bedside. This process was continued for twenty-five days, during which time the whole of the urine was passed continuously through the drainage apparatus. The urethra was frequently washed out with tepid water from the meatus, the fluid escaping by the perineal wound. In this way not only was the urethra placed at rest, but kept free from all influences which might interfere with the processes of repair going on within it. It sometimes happens in these cases, after the patient has become used to the perineal tube in the bladder, that an involuntary expulsion of a few drops of urine will take place by the side of the tube into the anterior portion of the canal, and escape by the meatus, of which the patient is conscious. When this happens I tell the nurse or the patient to immediateiy syringe out the urethra from the meatus through the wound, so as to prevent the lodgment of a single drop of urine in the canal. In ten days after the tube was removed the perineal wound soundly healed, and the patient was up. Though nearly twelve months have now elapsed, he has never seen a drop of discharge from the urethra, nor are there any signs of a stricture remaining. I saw him a few days ago on his way out to South America in perfect health.

[1] THE LANCET, May 15th, 1880.

I have since operated on two other patients, in one of which I also performed an internal urethrotomy, with equally satisfactory results. In another instance a precisely similar proceeding was adopted for a chronic hæmaturia, which, I believe had its origin about the prostate. No tumour or other cause for the hæmorrhage could be discovered, but the bleeding ceased after a month's perineal drainage, and has never recurred, the patient being now in excellent health. I presume there was some bleeding spot, which healed under the influence of rest and the temporary withdrawal of all action on the part of the muscles engaged in micturition.

A careful examination of some specimens of long-standing stricture shows that they must have been formed out of the remains of pouch-like and localised suppurations connected with the urethra filled up with granulation tissue. The formation of stricture masses such as these would possibly have been prevented by the adoption of more thorough means of drainage, for whenever cicatricial tissue is found thus disposed it seems to point to the difficulties under which the process of healing was effected. A well-performed lithotomy leaves behind but little trace of the processes of repair, though these possibly extended over some weeks.

There are one or two points connected with the operation to which I will refer. In the first place, I would describe it as a puncture of the membranous urethra from the perineum; for it may be reduced to one of the simplest proceedings in surgery, as it has already proved to be one of the most serviceable. Speaking for myself, my object is to make the puncture on the staff in the median line sufficient to permit my index finger to feel the groove, and at the same time to fit the incision. In this way hæmorrhage is effectually controlled from the first. I generally succeed in touching the staff with the first use of my knife. If anything more is wanted to make the groove felt, I use a pointed knife with the edge off. In this way I neither cut my finger nor cause hæmorrhage whilst I am preparing the way for the introduction of Wheelhouse's gorget, which is then made to slide along the grooved staff into the bladder. In cases of this kind it is quite unnecessary to push the finger into the bladder—in fact, this should be avoided. I once saw an acute prostatitis follow the process of dilatation with the finger, which is quite unnecessary. The bladder drainage-tube can be readily pushed along the gorget into its position, and in this way the operation may be accomplished almost without bleeding.

In the after-management of these cases the diet should be of such a nature as not to require the action of the bowels for at least a week; then the tube should be removed, and a soap-and-water injection carefully given. In one instance there was some secondary hæmorrhage, which was due to repeated actions of the bowel and straining following upon some aperient medicine which had been considered necessary. Temporary pressure with the fingers and a dose of opium at once stopped the bleeding, and the patient made a good recovery. Fresh drainage-tubes are introduced as often as necessary; they are made for me for these purposes by Mr. Wood, 81, Church-street, Liverpool.

Liverpool.

NOTES ON SOME CASES OF

TYPHOID FEVER OF A CEREBRO-SPINAL TYPE; HYPERPYREXIA TREATED BY ANTIPYRIN.

BY SAMUEL MACKEW, M.D. EDIN.,

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IN the spring of this year the town of Chantilly was visited by an outbreak of typhoid fever, in which the English colony of stablemen employed in the large training establishments of that town suffered severely. Eight of these cases were treated in the Hertford British Hospital, Paris, in the wards of Dr. Faure Miller, by whose permission I am enabled to publish the following account. The medical constitution of this outbreak was remarkable on account of the predominance of the nervous symptoms, contrasting strongly with the mild characters of the coexisting Parisian type, of which several cases were then under treatment in our wards. The more salient features of this epidemic are well shown in the following brief account of the case of T. M——, admitted on March 24th, 1885, and which may be considered as fairly illustrative of the others—all of which presented a striking clinical resemblance.

The patient had been out of health for about a week prior to admission, complaining chiefly of headache, dizziness, loss of appetite, and lassitude. His previous health had been good, and his personal habits were stated to be fairly regular. At the evening visit on the day of admission the following conditions were noted: Temperature 37·6°; pulse 80, regular and strong. Flushed and excited appearance. He complained of severe headache, lancinating in character, shooting down the neck and back. On palpating and percussing the spine great pain was evinced, but more especially over the lower dorsal region, where the slightest touch made the patient cry out. The conjunctivæ were injected; pupils contracted, but responded normally to light and distance. There was no modification of motility or sensibility, the knee-jerk on both sides, however, being much exaggerated. The tongue was tremulous, coated in the centre with greyish-white fur; the appetite *nil*; and there had been no action of the bowels for two days. The skin was entirely free from eruption, and examination of the viscera failed to reveal any abnormality, with the exception of slight tenderness on pressure over the left hypochondrium. The urine was febrile, and free from albumen or sugar. During the night the patient was restless, complaining bitterly of headache, and talking incoherently throughout the brief snatches of sleep. The night nurse also reported involuntary jerkings of both arms and twitchings of the facial muscles. No movement of the bowels. Next morning the temperature was 38·8° C., the pulse 88, and during the day no material change was noticed, the headache continuing very intense, and accompanied by several attacks of vomiting. At midday on the 26th, after complaining all morning of headache, stiffness of neck, and shooting pains in the back, he suddenly became restless and excited, and was with difficulty restrained in bed. The temperature, which at 8 A.M. was 38·2° C., now marked 41° C. In the course of the afternoon he had frequent attacks of vomiting and epistaxis, with five motions slightly streaked with blood. The twitchings of the facial muscles and the convulsive jerkings of the arms and legs became much more frequent and accentuated—especially so on the left side, where a tonic spasmodic contraction of the arm lasting several minutes was observed on two occasions. There was marked inequality of the pupils, the left one being dilated, with occasional strabismus of both eyes. Mentally the patient was quite delirious. During the afternoon 0·015 gramme of extract of opium and four grammes of antipyrin were given, and at 8 P.M. the temperature had fallen to 37·8°; pulse 86. The excitement, restlessness, and vomiting continued during the night, the temperature at 8 A.M. next morning being 37·8° C., but at midday had again reached 40° C. As no urine had been passed for sixteen hours, the bladder was emptied by the catheter, when the urine was found to contain albumen ($\frac{1}{10}$). Well-marked gurgling and tenderness were now present in the right iliac fossa, and there was a suspicious-looking spot on the right flank. The facial twitchings and convulsive movements of the limbs persisted, but the tonic spasm of the left arm and strabismus observed the previous day were not noticed. Antipyrin and opium were again given, the temperature at 7 P.M. being 38·1° C., and at 10 P.M. 39° C. The night was quieter, and next morning a condition of stupor had replaced the delirious excitement of the previous day. The breathing was at one time stertorous, at another it presented the Cheyne Stokes character; the pupils were equal, dilated, and responded sluggishly; while the urinary incontinence testified to the paralysis of the sphincter of the bladder. The patient could be roused with a little difficulty. The diarrhœa still continued, and on the chest and abdomen were several fresh typhoid spots. The temperature at 8 A.M. was 38·8° C., and at 2 P.M. it had risen to 41° C., when two grammes of sulphate of quinine were given, followed two hours later by a similar dose, the temperature then being 40·7° C. At 7 P.M. the thermometer still marked 40·8° C., and at 10 P.M. 40·6° C., when two grammes of antipyrin were administered. In half an hour the temperature had fallen to 39·8°, when a second dose of two grammes of antipyrin was given, and at midnight the temperature had reached 37·4° C. For the next few days this lethargic condition continued, sometimes interrupted by brief attacks of excitement. There was also a strong upward tendency of the temperature, which was well controlled by

frequent and regular doses of antipyrin. On the 31st a severe intestinal hæmorrhage occurred, considerably weakening the patient, the pulse being thready and irregular. On April 1st a smaller hæmorrhage took place, with a fresh crop of typhoid spots and a copious eruption of herpes on the lips and face. From this date until April 7th, when the temperature became normal and convalescence was established, the condition was that of an ordinary severe case of typhoid fever, with diarrhœa and several attacks of intestinal hæmorrhage, which, although small in quantity, was sufficiently alarming by reason of the low condition of the patient. During this period the nervous phenomena had quite subsided. The convalescence was a long and anxious one, both on account of the relapses, apparently independent of any exciting cause, and by the persistence of a mental obnubilation, in the early part, passing on to a less agreeable phase of irritability and suspicion. Deafness, amblyopia, and subcutaneous abscesses were also accidents of this period; but when he was discharged both the intelligence and special senses had resumed their normal condition.

The clinical features of the remaining cases were similar to those of the patient just described in the marked predominance of the nervous symptoms. In all the intense cephalalgia and rachialgia were present, followed by convulsions, which were sometimes ushered in by violent rigors, restlessness, vomiting, and delirium, and passing on in turn to a lethargic stage. Their period of onset varied, however, in two of the cases appearing towards the close of the prodromic stage to subside during the period of invasion, whilst in others they supervened later on in the evolution of the disease. The temperature charts were interesting, in that the cyclic oscillatory curve of typhoid fever was distorted by the sudden and irregular variations seen in meningitic inflammations. In the two cases where the onset of the nervous symptoms was early, the temperature suddenly mounted up from normal to 39° or 40° C.; whereas in others, where they were more tardy in appearance, the gradual ascension, with morning remissions, of the period of invasion were similarly interrupted. On the subsidence of the nervous phenomena, the temperature tracings once more resumed the regular typical typhoid character. Although there was in these cases this unusual determination on the cerebro-spinal meninges, nevertheless the abdominal symptoms were equally well marked. Abdominal pains, gurgling, diarrhœa, splenic enlargement, and pulmonary congestion were present, while in four of the cases severe intestinal hæmorrhage and epistaxis gave us considerable anxiety. The convalescence, also, was an unusually protracted one, being interrupted by one or more relapses, in spite of the greatest dietetic and other precautions. Deafness lasting several weeks was noted in three cases, but had entirely disappeared before the patients were dismissed.

The difficulty that may be experienced in diagnosing a cerebro-spinal form of typhoid fever from epidemic cerebro-spinal fever, especially when the abdominal symptoms are latent, is referred to in most text-books. In our cases, however, the coexistence of the abdominal symptoms removed any difficulty that might otherwise have existed in establishing the diagnosis. In the etiological conditions of this outbreak, it is interesting to note the similarity of the hygienic conditions obtaining in large training establishments with those of barrack life, military centres being known to be especially predisposed to outbreaks of epidemic cerebro-spinal fever. This similarity is further shown in the age and sex of our patients (males from twelve to thirty years), the special liability of adolescents and young adults to this latter disease being well established. In this connexion it may be remarked that, while in England authorities are not yet decided as to the specific affinities of cerebro-spinal fever it appears now in French text-books to have definitely taken its place among the typhoid diseases, after being successively considered as a simple cerebro-spinal phlegmasia and a pyrogenic disease analogous to puerperal fever. In the last edition of his "Traité de Pathologie Interne," Jaccoud describes it under the name of cerebro-spinal typhus, giving at some length his reasons for so doing. He considers, further, that whilst in abdominal typhus (typhoid fever) there is a morbid determination on the follicles of the small intestine, so in cerebro-spinal typhus there is a corresponding determination on the nervous centres.

The treatment was specially directed towards the nervous phenomena and the accompanying pyrexia, the former being controlled by large doses of opium and bromide of potassium, the latter by the recently introduced synthetic remedy, antipyrin. As this latter drug appears destined to take a prominent position among the antithermic agents, a short account of our experiences may be of some interest; and in order that a just estimate should be formed of the value of the following generalisations, it may be added that in these eight cases it was used on 102 occasions in various doses, both alone and in combination with other drugs. It is also well to recollect that, although given in typhoid fever, it was used to combat high temperatures, due in all probability to the meningitic congestion rather than the pyrexia more directly allied to the zymotic disease. Sulphate of quinine was the only other febrifuge employed, its use, however, being quickly abandoned when the pronounced superiority of antipyrin in this respect became apparent. The inefficacy of quinine in these cases was indeed striking, and is well shown in the brief account of T. M—— mentioned above; in other instances the same negative results were obtained. When introduced, antipyrin was said to be a powerful antipyrogenic drug, prompt in action and evanescent in duration, a reputation subsequent observations have fully corroborated. Its power is certainly incontestible, and from a study of our temperature chart would appear to be influenced directly by two factors, the dose and the temperature. Generally speaking, at the same temperature a large dose produced a correspondingly greater effect than a smaller one. This, however, only holds good at similar temperatures, for the higher the temperature the greater its antithermic power. A given quantity produces a greater effect when administered in the hyperpyretic zone, than in pyretic or subpyretic ones. Thus, in our hands, it would frequently happen that a two-gramme dose would lower the temperature from 41° C. to 38° C., whereas a similar quantity given at 39° C. would only succeed in bringing down the temperature to 37·6°, or only half the effect obtained in the first instance. The promptitude with which antipyrin acts is also remarkable, and in this respect I think it is independent of the dose. When employed, the temperature was taken at the time of administration, half an hour afterwards, and then at two-hourly intervals. With very few exceptions, a distinct and sometimes even considerable lowering of the temperature had occurred during the first half-hour. The fugitive quality of the physiological action of the drug constitutes its great inconvenience, and its employ demands the regular and frequent use of the thermometer. The effects of a full dose of two grammes rarely persisted longer than six hours, and in many cases for a much shorter period. As we became more familiar with it, we found the most convenient and economical method of employment was by giving at first a full dose (two grammes) followed by the same dose in two or three hours, which invariably reduced the temperature to normal, and then by smaller doses combat any indication of an upward tendency. With reference to the pulse rate, antipyrin appeared to be nearly inert. Most usually a fall of even several degrees in the temperature was unaccompanied by any corresponding slowing of the pulse. In the present epidemic the want of relationship between the pulse rate and the temperature, usual in the continued fevers, was specially marked, probably by reason of the cerebro-spinal complications acting reflexly. If this be the reason, then this disparity of the effect on the pulse rate and temperature would be readily explained. Vomiting was frequently observed, but appeared to be another reflex manifestation of the meningitic irritation, rather than due to the ingestion of the drug. In most of the cases the first few doses were followed almost immediately by a scarlatiniform eruption on the face and neck, unaccompanied by any itching or subsequent desquamation. The profuse sweating which, after the antithermic effect, is the most striking of its properties, seemed to increase during its exhibition, and in many instances was very troublesome. To control this, sulphate of atropine was employed, but with variable results, in some cases producing considerable benefit, in others remaining inert. On the whole, our experiences of antipyrin were eminently satisfactory, and the recovery of all our patients was a result which we feel to be largely due to its use. In no instance were any disquieting symptoms observed which, either directly or indirectly, could be attributed to its administration. It is true that the natural evolution of the disease was not arrested, yet by controlling the hyperpyrexia, and consequently the degenerative and

wasting processes due to it, antipyrin is invaluable, and will doubtless in the future take an important part in the pathogenic and expectant method of treating the zymotic diseases.

Leicester-place, W.C.

STYPTICS OR DEPRESSANTS IN THE TREATMENT OF HÆMOPTYSIS.

BY W. HENRY KESTEVEN, M.R.C.S., L.S.A.

THE following case is somewhat interesting, as it illustrates the value of the knowledge which will enable us to decide the best plan of treatment to be adopted in hæmoptysis.

A male adult, aged thirty-two, was brought to my surgery suffering from a violent attack of hæmotpysis. He was a well-made man, and did not look like a phthisical subject. I administered some extract of ergot and sulphuric acid, and sent him home. The hæmorrhage continued during the next few days, coming on at irregular intervals. Although the styptics which I was giving did not stop the hæmorrhage, they seemed to control it, as the attacks lasted a shorter time. Still I was not satisfied, and commenced injecting ergotine whenever an attack came on. The result of this was most satisfactory; the attacks became much less frequent, and seemed to be controlled within a short time after the injection. Of course so much hæmorrhage brought the patient to a very low ebb, and seeing the friends were alarmed I suggested that we should call in a second opinion. Dr. Samuel West met me in consultation, and after seeing the case he suggested the use of vascular depressants rather than styptics for the control of the hæmorrhage. His reasons for this seemed to me to be sound. Starting with the hypothesis that the lesion was probably in one of the larger vessels efferent from the heart, he argued that styptics and astringents would rather tend to increase the hæmorrhage, as by constringing the small arteries they would increase the blood-pressure in the larger—i.e., in the very vessels from which pathology showed that the hæmorrhage usually came. He therefore suggested the use of ipecacuanha in full doses, and in order to prevent sickness to combine it with opium. Accordingly I adopted this plan and pursued it for thirty-six hours. Almost immediately after the first dose of ipecacuanha and opium he had an attack of hæmorrhage. Concluding that this was of the nature of an accident, I went on with the treatment, but at the end of the period mentioned above was compelled to relinquish it and to return to the original plan of injecting ergotine on account of the marked increase of the hæmorrhage. Immediately the hæmorrhage was controlled, and I was shortly enabled to discontinue the use of the ergotine. The patient, however, rapidly became acutely phthisical, and died at the end of the eighth week from my first seeing him.

About ten days before the patient's death the friends again expressed a wish to see a consultant. This time Sir Andrew Clark came to see the patient with me. I related the history of the case, and Sir Andrew confirmed the unfavourable prognosis which I had already communicated to the patient's friends. In talking over the case with Sir Andrew Clark, he took the opportunity to express a similar opinion to that of Dr. Samuel West as to the treatment of hæmorrhage from the lung. However, on being told the experience gained in this case of the plan under discussion, he at once admitted that it afforded a complete answer to the theory in the present instance, assuring me at the same time that he was convinced that in the majority of cases depressants were more useful than astringents. On thinking the matter over, it seemed to me that this must depend largely upon the position of the lesion. Provided that the hæmorrhage came from the branches of the pulmonary artery, the use of drugs, which would render the small arteries patent, was right enough; but if the lesion were in the capillaries or in the pulmonary veins it would be more rational to use astringents, as they would by diminishing the calibre of the small arteries diminish the blood-pressure beyond them, and tend directly to check hæmorrhage from the capillaries themselves. The question then arises, How is hæmorrhage from the pulmonary arteries to be distinguished from hæmorrhage from the capillaries and pulmonary veins? Have we no other means of deciding than by trying first one method of treatment, and if that fails flying to the other? One guide we certainly have, and that is the colour of the expectorated blood. If the blood is dark and venous, it is a fair inference that it comes from the pulmonary artery. Whilst, on the other hand, bright arterial blood might be inferred to come from the pulmonary veins. It is true that the blood coming from the capillaries would be bright-coloured, but it would not come in such gushes, nor would it disappear in the intervals, as it might do in the case of a large vessel. This guide, however, is not always available, as it is not always that the doctor sees the patient while the attack is lasting, and it would be more difficult to determine the character of the blood some time after expectoration.

The use of ipecacuanha is urged by Dr. Duckworth in the seventh volume of St. Bartholomew's Hospital Reports, and in this paper Trousseau is quoted as an authority in favour of it. Curiously enough, this last author points out that one effect of ipecacuanha, if pushed, as he recommends, to the causation of vomiting, is to bring about a congested condition of the pulmonary veins. In the translation of Trousseau's work by the new Sydenham Society he is shown to be the chief advocate of the use of ipecacuanha.

A case in which ipecacuanha was used freely, causing vomiting, is related by Dr. de Havilland Hall in the eleventh volume of the same Reports, but a mixture of acetate of lead was used at the same time, and it is a little difficult to say to which remedy the beneficial effect was due. Dr Hall expresses himself as favourable to the use of the astringent.

Holloway-road, N.

DISLOCATION OF THE ATLAS WITH FRACTURE OF THE ODONTOID PROCESS.

REDUCTION; SURVIVAL FOR TWENTY-THREE DAYS.

BY W. WALTER GIBSON, M.D., M.CH.

RECORDED cases of this accident are sufficiently rare to justify the expectation that the following case will be of interest to those members of the profession who are readers of THE LANCET.

J. M——, aged fifty-eight years, by trade a smith, was returning home from a neighbouring village one evening early in September last year, and while making his way along a sheep-path which sloped up a steep hill in Wales, missed his footing and rolled down a bank, a distance of about one hundred yards, into a meadow beneath. I afterwards visited the scene of the occurrence, and in some parts the descent down which he had tumbled was almost perpendicular. He lay there in a state of unconsciousness till daybreak, when, realising his situation, he essayed to get up and go home, but said he found himself "too unsteady" to walk. Later he was assisted home, and I saw him about 10 A.M. the morning after the accident. He was then seated in a chair, his head very much set forwards, with his chin resting on his sternum, the neck and head being rigidly fixed in this position. He expressed himself in pain, of a burning character, about the head and neck, and declared himself unable to move his head in the least. On examination I found a great prominence at the back of the neck below the occiput, which, on first looking at, I took to be swelling of the soft parts, but on feeling was easily determined to be the spines of the cervical vertebræ. The highest that could be felt was separated about two inches from the occiput. It was then manifest that a dislocation had taken place; and by counting the spines from the vertebra prominens upward, I judged the displacement to be between the axis and atlas. The patient was perfectly conscious, and had then no paralysis, but was in great pain, and could not, he said, swallow anything. I had him carefully placed across the bed, his head and shoulders pointing outwards, and placing a hand lengthways along each side of his head, I made slight steady traction in the direction of the spinal axis, when, somewhat to my surprise and the patient's great delight, the dislocation was reduced with a slight snap, accompanied by very distinct crepitus, which made it evident that there was a fracture as well. On examining immediately, the apparent prominence of the cervical spines had entirely disappeared, and the head and neck were in natural line with the body. The patient was entirely relieved of pain, and expressed himself as quite well and fit to go about. I then had him

carefully placed in a comfortable position in bed, and fixed the head and neck in proper situation by means of pillows and sand-bags, and enjoined him on no account to move or be moved unless under my supervision, and directed that he should have only liquid nourishment, administered through a funnel, so that he should not have to move his head in partaking of it. I saw him every day for a week, during which time he went on well, partook freely of liquids, and slept well. He complained of occasional transient pains about the neck and face. There was no rise of temperature nor other sign of inflammatory action about the meninges. After the first week I visited him every alternate day, and his progress was without interruption till the evening of the twenty-third day. On that day I had seen him in the afternoon and found him going on as before. In the evening he begged his wife to give him some solid food, and she gave him some bread-and-butter, which he ate without difficulty, but soon after eating it he was seized with severe griping pain in the stomach and bowels, whereupon he started up in bed, despite the efforts of his friends to restrain him, and almost immediately dropped down and expired. I saw him again before he was disturbed from the position in which he had fallen, and there was the same position of the head as when I first visited him, and the same prominence of the cervical spines, only now, there being no rigidity of the muscles, the head was very movable.

Necropsy.—On exposing the cervical spine there was apparent a considerable separation between the spinous process of the axis and the arch of the atlas, the atlas and head being carried forwards and the cord tightly stretched and pulled against the anterior surface of the canal. I removed then the other portion of the cord, and on neither side was there any structural injury save a small indentation on the anterior surface, which corresponded to the jagged edge of the body of the axis, where the odontoid process had been broken off from it. There was no effusion of blood. The odontoid process, with a portion of the body of the axis, had been broken off, and remained in its situation against the anterior arch of the atlas, the transverse ligament being intact. There were a few minute blood-clots on the surface of the fractured bone, but no blood seemed to have made its way into the canal and none of the larger bloodvessels were injured. So nearly complete was the dislocation that very little of the articular surface of the axis and atlas remained in contact, and in the dislocated position the cord was rather pulled across the fractured surface of the axis body, which accounted for the indentation on its surface before mentioned.

Remarks.—I think this case worthy of notice: firstly, as being an instance of an injury usually immediately fatal, in which a fatal result did not immediately follow; secondly, because the period over which the patient survived the accident was longer than in any recorded case with which I am acquainted; and thirdly, as raising the questions, "What result might be hoped for in similar cases should proper treatment be carried out, and not interfered with by any action of the patient or his friends?" and "What is proper treatment in such a case? is an attempt at reduction wise, or is it not attended with great risk?" It had been my intention to have kept the patient in the recumbent position for two or three months, and then have fitted on him a mechanical support, after the fashion of those used to support the head in spinal disease; but now, having examined the injuries, I question if such repair could ever have taken place as to permit him to go about without re-dislocation being likely to occur at any time, without, and perhaps even with, artificial support; and it is certainly unlikely that the odontoid process could ever have united with the rest of the bone from which it had been severed.

Kidderminster.

THE ANTWERP MEDICAL CONGRESS.—This Congress terminated its labours on the 30th ult., by a visit to the Hospital of the Stivenberg. In the full sittings it was resolved that "in the present state of relations between the peoples of Central Europe, land quarantines and sanitary cordons are useless and even dangerous measures; the fumigation of letters is useless." The majority of the Congress declared itself for the maintenance of maritime quarantines in seaports and at the mouths of rivers. Such quarantines were also pronounced to be feasible and efficacious in Belgium.

SANTONIN IN AMENORRHŒA.

BY WALTER WHITEHEAD, F.R.C.S. ENG., F.R.S. EDIN.,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY.

AT the risk of being regarded premature, I wish to attract early attention to the therapeutic value of santonin in the treatment of some forms of amenorrhœa, especially when associated with chloro-anæmia.

Some years ago, during my attendance upon a young lady of seventeen, suffering from an obstinate ingrowth of a toe-nail, it was incidentally mentioned that the patient had symptoms suggestive of worms. I prescribed ten-grain doses of santonin to be taken for two consecutive nights, and to be followed each morning by a seidlitz powder. No worms, however, made their appearance, but a few days afterwards I was casually told that menstruation, which had been in abeyance for several months, had again taken place, and in a much more healthy manner than formerly. The coincidence did not impress me at the time, and I never for a moment supposed that the reappearance of the catamenia had the most remote connexion with the two doses of santonin. The subject did not cross my mind again till upwards of twelve months afterwards, when one day, whilst prescribing for a young girl suffering from ozæna, I was forcibly struck with her chloro-anæmic appearance. Influenced by some impulse—"the association of ideas" I suppose—I ordered santonin in the same manner and in the same doses as in the previous case, and, much to my surprise I must confess, with the same results. I have frequently since administered santonin in amenorrhœa with almost universal success, and in many cases after the ordinary remedies, including the permanganate of potash, have been tried in vain. I must admit that I have not had an opportunity in any of my cases to investigate the concurrent uterine pathological condition. I have simply given the drug empirically to all patients who have come under my notice suffering from amenorrhœa, with expectant uncertainty. My immediate object is to submit my brief experience to the profession in the hope that the experience of others may shortly test the potent or valueless influence of the drug in this particular derangement.

One of my cases is, perhaps, worth brief mention, as illustrating in a marked degree the class of cases so frequently brought under professional observation, and one that has received remarkable benefit from the drug. The patient was a young lady sixteen years of age. She was the daughter of an elderly drunken father, and she had a rheumatic mother. I saw her first when suffering from symptoms which, at the time, were attributed to ulceration of the stomach, fixed pain, anorexia, rejection of food, general physical prostration, and lassitude. She had alarming attacks of prolonged faintness, shortness of breath upon the slightest exertion, and obstinate constipation. Her expression was characteristically that of chloro-anæmia, and she was emaciated to the last degree. Confinement to bed, and nutritive enemata, exclusively used for alimentation for two months, restored the digestive organs to the tolerance of simple food; santonin promptly corrected the menstrual functions, and at the same time appeared like magic to restore the patient to robust health. Ever since any omission of the period has been immediately rectified by a single dose of santonin.

In cases of chloro-anæmia, subordinate to amenorrhœa, the drug appears to be of the most signal value, as I have invariably noticed that with the return of menstruation, or a discharge of blood from the vagina equivalent in effect, every symptom has rapidly subsided. The mere discharge of blood immediately following the administration of the drug will not, I suppose, be accepted by some as normal menstruation, but as a fictitious substitute; it must, however, be admitted that the practical value is established, when the discharge, be it vicarious or otherwise, is followed by the amelioration of the chloro-anæmia, which in reality constitutes the pressing ailment we have to contend with, rather than the mere absence of menstruation.

Whether santonin, or any other drug, is in a true sense a genuine emmenagogue is very doubtful, for if we regard menstruation as coincident with ovulation, and ovulation the periodic rupture of a Graafian follicle, we cannot expect the ovaries to assume this complex physiological process of definite periodic rotation at will; nevertheless, if a single

dose of santonin will immediately reduce the apparently normal performance of the function, together with other consensual phenomena, when they have been dormant for several months, it is entitled to some further distinction in our Pharmacopœia than that of being simply a vermifuge. It would be necessary to accept a theory that ovulation could at a certain stage be temporarily suspended, and capable of being immediately accelerated under the influence of certain induced conditions, before we could acknowledge the action of santonin as a true emmenagogue.

Manchester.

CASE OF A CRYPTORCHID.

By WILLIAM STEER, M.R.C.S.,
RESIDENT ASSISTANT MEDICAL OFFICER, ST. OLAVE'S INFIRMARY.

THE connexion between the organs of generation and those of the voice, and the association existent in point of time with their mature development has been always recognised; but how intimate this connexion is, together with the reason why, is not so fully made out. A case therefore where both these sets of organs are rudimentary must contain points of some interest, and a short account of such a one will give matter for reflection (apart from the curiosity that attaches to a condition so rare), and possibly prove of some practical value.

The patient, J. McC——, aged thirty-nine, was admitted into St. Olave's Infirmary in October, 1884, suffering from occasional neuralgic pains in different parts of the thorax, a dry cough, shortness of breath, frequent throbbing at the root of the neck, and pain on swallowing. Aneurism of the arch of the aorta just where it gives off the innominate artery was diagnosed. The man was kept quietly in bed; moderate doses of iodide of potassium were prescribed, and a non-stimulating diet given. The condition of the patient after a couple of months was greatly improved. About this time he complained of pain across his loins, and of having to pass urine as frequently as fifteen or twenty times during the twenty-four hours, hot tea in his case acting as a singularly smart diuretic. Attention being thus drawn to the urinary tract, the following curiously undeveloped condition of those parts was accidentally discovered.

The penis is about an inch in length and a third of an inch in diameter close to the pubes. The prepuce can be easily drawn back, exposing a normally shaped glans. The scrotum resembles in shape and appearance that of an infant, smooth and slightly pink in colour, though differing but little from the rest of the skin, which is singularly white, soft, and clear, there being an entire absence of hair on the trunk and limbs, save a few straggling filaments close around the penis. Passing over the crest of the pubis on either side can be felt a solid cord, about half the thickness of an ordinary cedar pencil, which ends at the upper part of the scrotum in a somewhat flattened fibrous termination, this being the only apology for testes that can be found. Moderate pressure between the finger and thumb gives some pain, but occasions nothing approaching the sensation caused by a like proceeding in a healthy mature testis. With the finger in the rectum no vesiculæ seminales can be felt, nor prostate, neither are any of the ordinary sensations experienced when pressure is made in the region of these organs. The frequency of passing urine points to want of development of the bladder, as the necessity to micturate frequently has existed as long as he can remember, and without other symptoms. On turning towards the larynx and examining through the skin, the trachea is found to be about the average size—perhaps, if anything, slightly smaller; but the cricoid cartilage is apparently quite natural as to size, prominence, and firmness. The thyroid cartilage, however, presents many marked signs of ill development, it being impossible to distinguish any prominence corresponding to a pomum Adami, nor any notch at the upper border of the cartilage. The larynx appears to be of the proper length and breadth, but gives one the impression of being flattened from before backwards. It is very movable, and the thyroid cartilage is softer than natural. The voice has never broken; it has the ordinary treble quality of a lad's previous to the age of puberty. The mammæ are probably a little larger than usual, with the nipple flat, on a level with the surrounding skin, and of a pinkish colour; as also is the areola. The patient is otherwise well made; is a fairly intelligent man; height 5 ft. 4 in., chest girth 38 in., and exceptionally large around the hips. His hair is weak and thin, and he has commencing cataract in the right eye. He is single, and has apparently never experienced sexual desires.

Rotherhithe, S.E.

A CASE OF DAMAGE TO THE SPINAL ACCESSORY NERVE.

By JOSEPH L. HEWER, F.R.C.S., B.S., M.B.

MRS. B——, aged sixty-nine, came to me in March, 1885, complaining of a tumour which had been growing out of her back for the last four months. Even beneath her dress a distinct swelling could be seen near the situation of the right scapula, and on uncovering the back it was at once evident that the tumour complained of was the right scapula, which was placed lower than its fellow and stuck out in a most remarkable manner. The right trapezius muscle was extremely atrophied, so that on asking the patient to shrug her shoulders only the left trapezius could be got to act at all, and it appeared that the displacement of the bone was entirely due to the wasting of the muscle on that side. On further examination the right sterno-mastoid was seen to be so wasted that it appeared beneath the skin as a narrow fibrous band, the difference between it and its fellow being most marked. All the other muscles appeared normal. As the patient was muscular, but very thin, she was a good subject for examination. On being questioned, she pointed out a small scar just in front of the right ear at the apex of the anterior triangle, which she said was where a doctor opened an abscess which was deep down in the neck four months ago. Until the formation of this abscess she was quite well, but a few days after it was opened the lump began to form in her back, which gradually got larger; for the last few weeks, however, it had remained stationary; the right arm also got so weak that she could hardly dress herself. I had several opportunities of examining her, but towards the middle of April quite lost sight of her. However, on Aug. 6th, 1885, I again saw her, and was much surprised to find that the right trapezius and sterno-mastoid muscles had apparently recovered their normal bulk, the right scapula being only very slightly more prominent than its fellow; and that she was able to use the right arm as well as she ever could.

I think there can be little doubt that the spinal accessory nerve was in some way or other damaged in this patient; it seems almost impossible that it could have been divided in opening the abscess; but it appears more probable that it had become implicated in the products of inflammation, and that thus for a time its function was abolished. What astonished me most was the complete recovery of the patient in so short a time, and that without electricity or treatment of any kind at all. I had told her that she would not get worse, but would certainly get no better, forming this prognosis on the rapid and extreme wasting of the affected muscles and their stationary condition for about a month. The case would appear to me to be a caution against early operation in some cases of supposed division of nerves.

Highbury New Park.

ON A CASE OF NEUROPATHIC PLICA.[1]

By DINSHA BAMANJI PESTONJI, L.M. & S.
(MASTER.)

IN October, 1883, a female patient (D. M——), aged about twenty, came to the Dispensary with a peculiar matting of the hair of the head. She said that two days ago, after the cessation of the usual menses, she took a bath and washed her head with soda and warm water. The substance that she applied to the head was supposed to be soda, but she could not say with certainty whether it was soda or anything else. About two hours after the application of the substance to the head, she said that the hair on the back part

[1] Read before the Grant College Medical Society of Bombay.

of the head began to twist and curl up, and by degrees it collected into two separate masses, one on either side of the head. They were about the size of a fist, of an elongated form, very hard and firm, like a rope. There was no greasiness about them, showing no hypersection of the glands. The hair was free and separate near the scalp, and had commenced twisting at the distance of about an inch from the roots up to the extremities. There was no roughness or increased heat of the scalp, and no pain on pressure; but she complained of headache, not very severe, and of tension of the scalp caused by the curling and twisting of the hair. The pupils were normal. There was no history of hysteria. Before she came to me she had tried the application of a fresh quantity of soda, and also soaked the hair with salad oil to separate it, but to no purpose. I endeavoured to separate it with my fingers, but did not succeed, though I attempted to do so for nearly ten minutes. A small part of one of the two masses was then soaked in rectified spirit for a few minutes, and an attempt was made again to separate the hair, but without success. I then asked her to go home and keep the two portions soaked in hot water for fully an hour, and then again try to separate the hair, and if she did not find this plan successful, to apply glycerine freely after well drying it. For her headache I prescribed bromide of potassium, with a view to allay the nervous irritation, if there were any. Next day, when she came to me, the headache was relieved, but the two masses were in the same state, as hard and inseparable as before. Not knowing what to do further with the case, I ordered again a mixture of bromide with a view to work on the nervous system, and asked her to re-soak the hair in hot water. I did not see her after this, and on inquiry I learnt, to my great disappointment, that she had cut off the hair and thrown it away.

Remarks.—Very probably the curling and matting of the hair was not due to the application, but to some peculiar nervous influence; because, if it resulted from the former, the hair of the whole head might have rolled up into a mass, and not into two separate symmetrical masses. Besides, the hair on the front half of the head was entirely free and separate. Again, there was headache, which was relieved by bromide. These considerations lead me to think that the cause of this peculiar matting was due to nervous influence.

Bombay.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

TREPHINING THE SKULL FOR TRAUMATIC EPILEPSY; RELIEF.

(Under the care of Mr. HOLMES.)

THIS case resembles in many respects one which was brought before the Clinical Society in 1880.[1] The case was that of a boy who had been under treatment at Charing-cross Hospital for epilepsy following on injury to the head. When the bone was trephined it appeared healthy, as did also the dura mater beneath. The operation was followed by considerable relief, as in this patient's case, but after a few months the symptoms recurred, with, however, less severity. The surgeon who brought the case forward quoted some interesting statistics, the cures being placed at 60 per cent. of those operated on.

For the following notes we are indebted to Mr. Margerison, surgical registrar.

W. T——, a police-constable, was admitted into St. George's Hospital in December last, with the following history and symptoms. Two years previously he had received a blow on the head from a brick. The scalp was not cut, and he was able to apprehend his assailant. Half an hour later, however, he became unconscious, and remained so for six days. After a few weeks' rest he was able to resume his duties as a policeman, but pain was constant at the seat of the injury, and he had frequent attacks of giddiness. On this account he applied at the hospital for relief. He looked in good health, but was gloomy and despondent. The spot to which he called attention on his head was very tender; there was no scar, but by some it was thought a slight depression existed in the bone. The most remarkable fact, however, was that when firm pressure was made with the finger for a few moments on this spot, the man was seized with epileptiform convulsions, not completely losing consciousness; he presented all the appearances of a man suffering from petit mal. Under these circumstances it was thought proper to examine the condition of the skull. On Dec. 26th, therefore, Mr. Holmes made a crucial incision through the tender point. No periosteal thickening existed, and no crack or depression in the bone. A crown of bone was next removed with a trephine, but this bone was not thicker or harder than natural, and the dura mater was quite healthy. Nothing further, of course, was done. The wound healed quickly and with no accompanying fever, and for some weeks he had none of his old pain or giddiness. When he left, however, on March 1st, he was again beginning to complain.

[1] See THE LANCET, Oct. 16th, 1880, p. 618.

STROUD HOSPITAL.

RAPID MALIGNANT GROWTH OF THE LOWER END OF THE FEMUR; AMPUTATION AT THE HIP-JOINT; DEATH.

(Under the care of Mr. COOKE.)

FOR the following notes we are indebted to Mr. Percy Edgelow.

J. G——, aged twenty-six, apparently a strong healthy man, applied at this hospital for advice, on April 22nd, concerning a swelling at the lower and inner side of the left thigh. On examination a firm oval swelling about the size of an ostrich's egg was found, with a decided sense of fluctuation, without pulsation, just above the inner condyle of the femur, and apparently connected with that bone. There was no pain, but slight tenderness on deep pressure. On inquiring into his history, the swelling seems to have first attracted his attention six weeks previously, when almost its present size, he having been quite unaware of any such growth there before. He complains of having felt weaker, and has lost flesh within the last two months. He is a stickmaker by trade, but has no definite recollection of any injury to the leg, but fancies he knocked it just above the knee about twelve months ago. There was no syphilitic history. His father and mother are alive, the former subject to chronic rheumatism, the latter healthy. No history of cancer in the family. On inserting an exploratory trocar some blood issued; in no direction could any pus be found. He was advised to come into the hospital without delay, and was admitted on April 30th. He was placed on iodide of potassium for ten days, during which time the circumference of the thigh around the most prominent part of the tumour increased from 15 in. to 16½ in. There were no enlarged inguinal glands. After a consultation of the staff he was recommended to undergo an operation, the nature of which would be, first to cut down on the growth and remove it if possible, and if the femur were found to be involved to amputate the thigh above. Since his admission he had heard of an old woman living in a neighbouring village, reputed to be most successful in the treatment of cancers and tumours of all kinds. To her he determined to repair, on the strong recommendation of his friends; and notwithstanding the urgent protestations of the surgeons of the hospital, he left to consult her, and was heard no more of until July 29th, when he applied for readmission in the following condition. His general state was very much weaker, he was extremely anæmic, and had lost flesh considerably. The tumour had increased from sixteen inches and a half at the circumference of the thigh about three inches above the knee to twenty-nine inches and a half, and the growth had extended up the thigh, more especially on the outer side, to within a hand's breadth of the great trochanter. A circular aperture about the size of half-a-crown existed in the skin on the outer side of the swelling, through which blood had been steadily oozing during the past week. The skin covering the whole tumour was coated with a dark greasy substance, presumably ointment of some description, on removing which large tortuous and dilated veins were to be seen. There was fluctuation

throughout the tumour, also a loud bruit on the inner side, but no pulsation. He had been under the woman's treatment during the interval between his admissions, who had subjected the thigh to the continued application of poultices, mallow leaves, and an original ointment, the combined effect of which, after nearly three months' treatment, had left him in the condition mentioned.

The man was now willing to undergo any operation advised. The staff concluded that the only chance which might possibly benefit him was amputation at the hip-joint, which was performed under ether by Mr. Cooke on Aug. 2nd, by means of a large external and small internal flap, hæmorrhage from the proximal side being almost completely controlled by Lister's tourniquet. During the latter half of the operation both radial and temporal pulse were absent, and the patient showed signs of syncope two or three times, from which he was revived by the subcutaneous injection of brandy and sulphuric ether, as well as the application of strong ammonia to the nostrils. He partially rallied after the operation, was quite sensible, expressed himself as free from pain, and took nourishment and stimulants every hour, in the form of beef-tea, brandy, carbonate of ammonia, and cinchona, with one grain of opium every four hours. Six hours after the operation he first showed signs of great exhaustion, from which he did not rally, dying seven and a quarter hours after amputation.

The subsequent examination of the tumour showed it to consist of an almost uniform soft reticulated mass, easily breaking down under the finger, the large alveoli filled with blood, the shaft of the femur expanded, with worm-eaten appearance, and broken through here and there with portions of bone located in parts throughout the tumour. Neither muscles, nerves, or arteries were distinguishable, although the tibial vessels and nerves were intact. The knee-joint was unimplicated, except to a small extent in front, where the patella was represented by a small, fragile, irregularly worm-eaten mass of bone, without any definite contour.

EXTENSIVE ULCERATION OF THE ALÆ AND SEPTUM NASI.

(Under the care of Mr. COOKE.)

C. D——, aged twenty-two, a labourer, came to the hospital on May 26th for treatment, in the following condition. Absence of the septum nasi in its entirety; also of the greater part of the lower lateral cartilages and lobes of the nose. A thick, dry scab coated the surface from the margin of the lower lip to the ulcerated margin of the nose; the lower lip itself very œdematous, and the skin of the face around the scab inflamed and studded here and there with tubercular nodules varying in size from that of a pin's head to a small pea. He was unable to sniff or blow what remained of his nose. He gave the following history. Three months ago his nose, which was previously sound, presented a small swelling on the inner surface of the right cavity, soon followed by a slight discharge of "bad-smelling matter and blood," leaving a sore, which spread rapidly, involving the septum and extending to the opposite cavity. The sore then spread to the margin of the nostrils, and, steadily invading the neighbouring tissues of the nose and upper lip, continued its destructive action till the appearance presented on his admission. There was no definite syphilitic history, although when examining his throat an entire absence of the velum palati was found, its original situation being indicated by an oblique scar. There was no indication of any primary sore on the penis, neither had he experienced, according to his own account, any of the usual secondary symptoms. He was placed on one-sixteenth of a grain of the biniodide of mercury three times a day internally, and locally alternate applications of poultices and iodoform, the former to bring away the scabbing that coated the sore on the alternate days when they were omitted, after which the sore remained clean, looked healthy, and healed up steadily under iodoform alone. He left here on June 30th, the alæ of the nose having closed in, so as to form a central nostril.

KASHMIR MISSION HOSPITAL.

CASES OF NERVE-STRETCHING; REMARKS.

(Under the care of Mr. H. D. M'CULLOCH, M.B., C.M.)

THE following notes have been furnished by Mr. A. Neve, F.R.C.S. Edin.

CASE 1. *Nerve-stretching for Multiple Cerebro-spinal Sclerosis.*—B——, a cowherd, aged thirty-five years, was admitted on March 25th, 1885. Present illness commenced two years ago; it began with shaking. For a year there had been great weakness. Has not had syphilis. He gives no history.

On admission there was general shaking, especially of the upper part of the body and head. Could scarcely walk, even with the aid of a long stick. When he moved the shaking was quite violent. The arms were less affected, but he could not drink water without spilling it. The legs were very weak. There was no anæsthesia, excepting slightly in the sole of the foot. When he walked he lifted his legs in a jerky way. There was marked ankle clonus. When recumbent the knee reflex lifted the limb off the table. He had no pains. The pupils were dilated. There were no morbid ophthalmoscopic appearances.

The operation of stretching the sciatic nerves was performed on March 26th. Usual strain, about 25 lb.

March 27th.—No change.

28th.—Complains of weakness.

29th.—Shaking is much less. Wounds healed.

April 9th.—Walks better; can stand without help. Jerking not noticeable except when walking.

13th.—Has gained in strength. No tremors when standing; only slight when walking, which he does without a stick. Reflexes unchanged. Nitrate of silver pills ordered. Previous to this date no medicine had been given.

May 19th.—Very much general improvement. Walks pretty well, but slowly. Slight tremors of head when excited. No other abnormal symptom. Dismissed, relieved.

CASE 2. *Locomotor Ataxy.*—A woman, thirty-five years of age. Had been ill for two years. She was brought in on a bed. The case was considered by native assistants to be one of acute rheumatism. She suffered from weakness of the extremities, and could not stand unsupported. There was considerable anæsthesia of the legs, loss of knee jerk, and pupil reflex (Argyll-Robertson pupil). She had intense shooting pains in the knees and ankles.

She was treated for a short time with tonics and mercury. When the success of the former case became visible, and as no relief of symptoms had followed the use of medicine, an operation was decided on, and on March 31st both sciatic nerves were stretched.

April 1st.—Pain in legs and joints quite gone. Slight pain in wound. Appetite small.

4th.—Wounds healed.

13th.—Still improving. Stands unsupported. Walks when guided. Ataxic gait marked. Knee jerk elicited, but not directly. Appetite improving; is getting stouter. To take nitrate of silver pills. Her friends considered her cured, and took her home.

CASE 3. *Locomotor Ataxy.*—Sepoy, aged fifty years. He had probably had syphilis. He was very weak, and could scarcely walk. He also had acute pains in the ankles, with an ataxic gait or shamble. Anæsthesia of the feet. Argyll-Robertson pupil.

He was treated for some time with iodide of potasium, &c. without benefit. On May 10th the sciatic nerves were stretched.

May 12th.—Pain relieved.

15th.—Walks without a stick.

20th.—Wounds cicatrising. Much benefit. Anæsthesia almost cured. Ataxic gait still very marked. Went home.

June 1st.—Had been going on well. Visited us to report progress. There had been no return of the pain. On the 20th he ceased attendance.

CASE 4. *Nerve-stretching for Multiple Spinal Sclerosis.*—S——, a Brahmin, aged twenty, admitted 21st May. Had never been very strong. Had had several illnesses—abscesses of glands, fevers, &c. A year ago he contracted syphilis, and was treated with mercury. Ten months ago he had sudden retention of urine owing to paralysis, with want of sensation and power in the lower limbs. Since then he has never been able to stand or walk; on the slightest attempt to do so he was seized with violent tremors, which were only stopped by force.

On admission to hospital he had very violent tremors and incoördination of the muscles, especially of the legs, but also slightly of the body and arms. Tendon reflex and ankle clonus much exaggerated. Urinary incontinence.

Both sciatic nerves were stretched on May 23rd. The operation was followed by immediate improvement of sensation and diminution of tremors. Wounds healed quickly. But the patient does not consider himself otherwise im-

proved. He cannot stand, and the urine continues to dribble away.

June 25th.—No improvement in locomotion. Patient continues in hospital. Iodide of potassium and mercury are being administered, with powerful counter-irritation over the spine.

The above notes were written a month ago, and since then considerable improvement has taken place. The patient can now stand, and even walk, with assistance.

Remarks by MR. NEVE.—The operation of nerve-stretching does not yet seem lifted out of the region of empiricism. But as I showed in a record of 170 cases of nerve-stretching for leprosy (*Edinburgh Medical Journal*, Nov., 1883), the operation almost invariably effects much good in that disease, the benefit being often permanent. The above cases, operated on by Dr. M'Culloch and myself, are the first, other than in lepers, in which in Kashmir the operation has been resorted to. The very variable results, of which large numbers have been published by other operators, show that while nerve-stretching is often useful, the indications for its employment cannot yet be formulated. For this reason I lay no stress on the successful result of the first three cases. But it is worth noting that the improvement was in each immediate, that no other treatment was employed, and that the diet and external conditions were but slightly if at all improved. The success of the first case surprised me, as I had observed a case of cerebro-spinal sclerosis for more than two years while a student. The last case, in which the locomotory powers were not at all improved, was perhaps operated on at too early a stage. Preferably I would operate for non-focal and chronic lesions of the cord.

Two other cases are now in the wards lately operated on, both of which are improving.

Reviews and Notices of Books.

The British Pharmacopœia, 1885.[1]

THE new edition of the British Pharmacopœia has at length reached completion. It is eighteen years since the last edition was published, and had the present work appeared ten years ago it would have been more welcome, for it has not only been so long in preparation that some of it is old before it is placed in the hands of the physician and the pharmacist, but the need of a revised work has been sorely felt. On the whole, however, it may be said to justify our expectations. Many corrections and excisions have been made and new articles admitted. In spite of the fact that twenty-one preparations have suffered exclusion, the volume has been enlarged by about 100 pages, chiefly from the introduction of new drugs not contained in either the 1867 edition or the addenda of 1874. With the advance of time and the opportunity allowed for the test of new drugs and the trial of old remedies in such a long lapse of years, we opine that the former must of necessity exceed the latter in number. "Of making books there is no end" were the sapient words of King Solomon, and from the continual advocacy in the British and foreign medical press of therapeutic remedies, it would appear that there is no limit to new medicinal agents. We are prepared to make some allowance for the difficulties the Medical Council have had to contend with in the selection of reliable agents, and the exclusion of old-fashioned articles that have been superseded or found unsatisfactory. It is questionable whether there is wisdom in the adoption in a national standard of such a long array of products and preparations of drugs which are expected to be kept on the shelves of the druggist's shop. We hail, however, with satisfaction the official recognition of aloin, eseria, lupulin (which is more definite in efficacy than hop strobiles), santonin, salicin, gelseminium, chlorodyne, boracic and salicylic acids, butyl-chloral, sodium bromide and sulphite, dilute hydrobromic acid, and tincture of podophyllin, as well as two oleates, two hypodermic injections, and three alkaloidal discs, also tincture of lemon, which is a nice vehicle, and the use of paraffin and cocoa-butter as media in unguents and suppositories respectively, since any attempt to modify the repulsiveness or inelegance of medicines for external or internal administration is a step in the right direction. Other capital introductions are liquefied carbolic acid, fir wool oil inhalation, dilute citrin ointment (pharmacists being often much puzzled as to the strength prescribers mean, some making it one to three, and others, after Beasley, one to seven), liquid extract of dandelion (although what is intended by liquor taraxaci is still a problem), and especially a further instalment of concentrated liquors which in the weak form never keep well, notably liq. ammon. cit. We do not, however, give such a hearty approval with regard to dialysed iron solution, spirit of cinnamon, sulphate of calcium, and lactic acid; while arsenious iodide, decoctions of barley and taraxacum, extract of alder buckthorn, together with coca and saffron, and their preparations, might easily have been dispensed with. Again, we fail to see the propriety of restoring to the pages of this edition the obsolete calamine, actæa racemosa (disguised under a new title—cimicifuga), staves-acre, and the liquor calcii chloridi of the Edinburgh Pharmacopœia, while we have resolvents of much higher repute; indeed, very many other articles might have been expunged from this edition without loss either to the medical faculty or the pharmaceutical fraternity. We need only instance aniseed-water, pimento-water (so liable to decomposition), musk, elemi and its ointment, compound almond powder (which soon gets musty), syrup of mulberry, rhubarb wine, the tinctures of aloes, cinnamon, galls, and larch, the compound mustard liniment, which is far too expensive for many patients, and reduced iron, which every chemist knows quickly spoils by exposure to air, also aqua laurocerasi (a preparation so dangerously uncertain in strength), belæ fructus and its extract, which have given so little satisfaction in this country, though much extolled when in the *fresh condition* by practitioners in India, and mist. spiritûs vini gallici, an old-fashioned homely remedy, in keeping with which toast-water and the common gruel of the housewife might be officially recognised. This list, we need hardly say, might be very considerably extended. As a pertinent example, we may cite from our experience decoctum dulcamaræ, a gilt-labelled bottle for which we have known to stand on the shelf of a first-class pharmacy *quite empty* for a period of a dozen years or more! But why exclude pil. quiniæ, the very best form of a valuable tonic and antipyretic, while the confection of hips, which entered only into that pill, has been exempted? Rather would we see a reduction in the number of the opium preparations, whose name is legion; and, parenthetically, we would say that confection of hips is far preferable to that of rose petals (being less astringent and making a better "mass") as an excipient in many of the *pilulæ* of the Pharmacopœia. It remains for the therapeutic consideration of the question to discuss the merits of araroba, jaborandi, cascara sagrada, sambul, spt. armoraciæ co., and sundry other medicines, many of which from the pharmacist's point of view are in little request, not to speak of useless substances like sassafras, mastiche, mezereon, bread-crumb, and marble, and we might multiply illustrations to a considerable extent. We note with satisfaction the retention of some useful preparations that are commonly deemed inelegant, although any attempt to improve the appearance of such is highly desirable—e.g., in lin. tereb. acet. the addition of yelk of egg would serve the purpose indicated. An obvious improvement in galenicals is observable in infus. cinchonæ acidum, while a decided advance is made in the new formulæ for tinctura quiniæ. We are glad to see the expulsion of tinctura castorei, decoct. ulmi, digitalin, and the decoct. dulcamaræ

[1] Our present criticism is to be regarded as written chiefly from a pharmaceutical point of view; the therapeutical aspect will be considered in a subsequent issue.

above mentioned—that is, looking from the pharmaceutical standpoint, for in the last instance there are still some believers in the efficacy of dulcamara in chronic skin diseases. Albumen ovi has been struck off the list, although egg-yelk is still an ingredient in the compound brandy mixture already alluded to. In some cases a preparation, seemingly superfluous, may be retained for a particular purpose; to wit, opium wine is better than laudanum in eye lotions in conjunction with plumbic acetate. This reminds us that one or two collyria might have been advantageously introduced—for example, those of lead and zinc; while the addition of salicylic acid to lard, in lieu of benzoin, would possibly have been a prudent step. We see no real need for both an oxymel and syrup of squill; for two decoctions of sarsaparilla, two extracts of dandelion, two carbonates of zinc, two iron mixtures, two squill pills, a couple of tinctures each of quinine, opium, lobelia, and cinchona; for two lead ointments, two syrups of orange, two suppositories of morphia and of tannin; nor for two spirits of ether—now that "Hofmann's anodyne is made official; while both tinctures and solutions (the latter of two degrees of strength) each of acetate and perchloride of iron seem to constitute a case of unnecessary addition to a vocabulary already too voluminous. We lean to the *liquores* rather than to the *tincturæ*, which are more unstable. On the other hand, it is an obvious blunder to omit Easton's, Fellows', and Parrish's syrups, while rendering official Donovan's solution and an imitation of the famous nostrum chlorodyne. The latter is but a poor imitation, however, being deficient in the quantity of chloroform and morphia, while the extract of Indian hemp is left out altogether. Moreover, we think the name a peculiarly unhappy one, especially when there was previously a compound tincture of chloroform. We would suggest as a suitable appellation "liq. morphiæ et chloroformi co.," or more simply "liq. chloro-morphiæ," adopted in Martindale's excellent compilation, "The Extra Pharmacopœia," with the alternative of "chlorodyne," which even as a synonym has been quite ignored.

Our space will not allow us to discuss *seriatim* the numerous points we would like to allude to, but we cannot refrain from animadverting to a few more heads. The descriptions generally are accurate, and in some cases much improved (that of starch and copaiba, for example), though still not without blemish. The definition of wheaten flour is quite inadequate. Cardamoms are still directed to be freed from their pericarps at the time of use; this is troublesome, and either the seeds alone should be mentioned—and they keep better in stoppered bottles than in paper parcels or wooden drawers, even when, in the latter method of storage, they are invested in their membranous pericarps,—or the whole fruit could be recommended, making allowance of about 25 per cent. for the inert coverings. The cinchonas and their multitudinous preparations have undergone great transformation, which both physician and surgeon must particularly observe. By the instructions of the last edition of the British Pharmacopœia all the galenicals containing cinchona, with the exception of two (mist. ferri aromatica and tinct. cinchona co., which had pale bark in their composition), were made from the yellow bark, whereas no preparations save quinine were made from the red variety; *now* the tables are turned, and all preparations are made from the cinchona succirubra, although salts of the alkaloids, including cinchonine and cinchonidine, as well as a new salt of quinine—the hydrochlorate—are permitted to be manufactured from many species of the genus cinchona. More than this, the use of remijia is recognised for their extraction; yet no account of the last-named plant is given; it has no entry for itself, neither has it been inserted in the index. There are other cases of this sort, for Fehling's solution, mentioned under lactic acid, as a test, has no formula given anywhere, and surely it is worthy of a place in the appendix. In this edition compound liquorice powder has been restored to its proper composition, as directed in the Prussian Pharmacopœia. It would have been well had this been effected in 1874, instead of leaving out sulphur and fennel, thereby causing much confusion to all concerned—a confusion which will now be repeated. In the botanical department some sensible changes have been made, particularly the substitution of rhizoma for radix, where the latter word was erroneously used, but in the case of ipecacuanha radix ought to be inserted. A number of names of plants have been altered, whether discreetly or not is a matter of opinion—e.g., almond, broom, cousso, &c. At last the proper source of pareira is given, and the expression "undetermined species" is now scarcely observable. We notice a few inconsistencies, however; in one place we find rhamnus purshianus for sacred bark, while its derivatives bear the name "cascara sagrada." References to Bentley and Trimen's "Medicinal Plants" for plates to identify official plants is noteworthy.

Now let us glance at the chemical section of the book. Processes are little altered, and we will only regard the nomenclature. Here there is a decided improvement based upon the modern conception of constitution of salt and oxides. Thus, it is more correct to say carbonate of potassium than carbonate of potash, chloride of sodium than muriate of soda, as it is considered that a salt is formed by the substitution of the hydrogen in an acid by a metal, and not by the union of an oxide with an acid or an anhydride. But we would condemn *in toto* the new-fangled names for alkaloids, since the termination "ia," as in morphia, &c., is a fundamental point of distinction from substances ending in "in," such as the glucosides, glycerin, and so on. The whole collection of synonyms still requires overhauling. On the one hand, the retention of names like chloric ether and sulphuric ether is manifestly absurd; while, on the other hand, familiar names, such as gypsum, Prussian powder, spirit of salt, pyroligneous acid, emplastrum roborans, and camphorated oil, as well as the chemical terms, ethylic ether, phenyl hydrate, sulphur dioxide, and others, are conspicuous by their absence. Arsenious anhydride is erroneously entered as an acid; borax is properly called a pyroborate, but the corresponding terms, ortho-phosphoric acid and ortho-arseniate of soda, are disregarded. Features worthy of commendation are thermometric degrees on the Centigrade scale, the adoption of "parts" in parallel columns with ounces and grains in the formulæ, and, finally, the specification of graduated sizes of grain in the comminuted condition of drugs. The standard of these degrees of disintegration are, however, only to be found in the preface; we think it would have been wiser to have inserted such a scale in the appendix. Another useful addition to the appendix would be a brief summary of Moh's classification of crystals. Then such crystallographic descriptions as rhomboidal plates, oblique rhombic prisms, and the recognition of salts involved thereupon would be more within the comprehension of the tyro in pharmacology. In conclusion, it is pleasing to observe the acknowledgment of the able editorial services rendered by Professors Attfield, Bentley, and Redwood in the revision of this important work.

Pathological Mycology. By G. SIMS WOODHEAD, M.D., F.R.C.P. Ed., and ARTHUR W. HARE, M.B., C.M. Section 1: Methods. Edinburgh: Young J. Pentland. 1885.

THIS is essentially a laboratory handbook, and its publication should do much to extend the knowledge of the methods employed in the detection, differentiation, and cultivation of septic and pathogenic micro-organisms, which claim so much attention in the present day. The authors, indeed, are sanguine of a very wide development of such

research, for, after alluding to the patient observations of the few ardent and enthusiastic workers that have placed the germ theory of disease upon "its present sound and logical basis," they go on to say: "Sound and logical as this basis is, it must still be amplified in many directions. The work carried on up to the present by the few must now be taken up by the whole medical profession, or by as many as are anxious to determine the true position of the question. The amount of material at command is enormous; the methods have gradually been so simplified that the busiest practitioner may help in the work, and by so doing disabuse his mind of many exaggerated notions as to what is actually proved and held by our modern authorities as to the relations between micro-organisms and disease—in the first place generally, and secondly in certain specific diseases."

In such a work theoretical considerations have but a subordinate place; but as the need for research is bound up with the notions respecting the *modus operandi* of the supposed infective organisms, it is impossible wholly to leave theory out of the reckoning. In the introductory chapter, accordingly, we find a discussion of the leading questions that have arisen with respect to the resistance of living tissues to invasion by micro-organisms, the manner in which the latter effect an entrance, the variations observed in their action upon the tissues, and other matters, which are more or less problematical or inferential.

The methods employed for the detection of micro-organisms depend upon the remarkable degree of resistance which these latter exhibit to chemical reagents, as caustic alkalies and acids, and their equally remarkable affinity for the aniline colours; and undoubtedly the subject would never have attained such a prominence had it not been for the discovery of these now well-established facts. It is, indeed, highly probable that there are micro-organisms yet unknown, which will only be revealed when some suitable treatment is discovered to bring them within the ken of the microscopist. The various reagents at present in most constant use are described, and concise instructions are given as to the methods of preparation of recent and hardened specimens. The mere detection of the microbe is, however, only the first stage of the process; its isolation and determination of its macroscopical characters are essential in the work of proving its suspected specific character. Artificial cultivations, in solid and liquid media, and the precautions necessary to obtain perfectly sterilised materials and purity of inoculations, form the groundwork of all such investigations. The chapters devoted to these "methods" are particularly detailed and precise, so that no one who faithfully follows the directions given can fail to attain results which are as convincing in their demonstration of the specific differences of these minute organisms as they are simple in their production. But the operator must do his work with the most scrupulous care and attention, otherwise he may find that the product of his cultivations is contaminated with multifarious species. The various media that are employed for this purpose are—sterilised potato, sterile bread-paste, sterile nutrient jelly (in test-tube or capsule), sterile agar-agar mixture, and sterilised solidified blood-serum; these are the solid media. The liquids used for cultivations include animal infusions, urine, milk, blood-serum, cheese infusion, vegetable infusions, and various artificial fluids, of which Pasteur's mixture of water, cane sugar, ammonium tartrate, and ash of yeast was the first to be employed with this object.

The book is furnished with two appendices: one giving a short description of the ordinary species of fungi and other micro-organisms, and a list of antiseptics showing their relative value; and another comprising a bibliography, which from its extent serves to show how active has been the work done in this direction within the few years that it has been seriously studied. The various subjects are classified, so as to facilitate reference. Such a list is invaluable to anyone desirous to pursue the study of any of the diseases ascribed to micro-organisms. Lastly, too much praise can hardly be awarded to the very beautiful coloured drawings, particularly those of various potato and gelatin cultures, which have been furnished by Mr. Tatham Thompson; they form a special feature of the work, and in their fidelity supplement in an admirable manner the descriptions of the text. The authors will have no reason to regret the time and labour expended on the production of their work, which is sure to be widely read and appreciated; and the continuation of their labours will be looked forward to with interest.

OUR LIBRARY TABLE.

Ambulance Lectures: First Aid to the Injured. By SAM. OSBORN, F.R.C.S. With illustrations, pp. 92. London: Lewis. 1885.—This work consists of five lectures delivered by the author to his ambulance pupils connected with the St. John Ambulance Association. They seem, on the whole, to be well adapted for the purpose; but we think the first lecture, on Anatomy and Physiology, or, as the author terms it, "structural and functional," might have been judiciously omitted; it appears to us to partake too much of the character of "cram," and to be likely to lead many of the pupils to suppose that they possess an amount of scientific knowledge which could only be gained by careful and long-continued study. The usefulness of the book is greatly diminished by the want of an index. If intended as a handbook, there should be the means of immediate reference to any particular subject.

Health-resorts at Home and Abroad. By M. CHARTERIS, M.D. Pp. 156. London: Churchill. 1885. — The author informs us that this book consists of some holiday sketches which, in the form of lectures, were delivered to students attending the course of therapeutics in Glasgow University. We regret that he has taken a title already adopted by Dr. Burney Yeo in his excellent work. Dr. Charteris gives a very readable account of a few of the principal spas in England and Germany, of Vichy, and of the winter health-resorts in Switzerland; but the alphabetical list of health-resorts which he has added is very far from complete. The list of preparations and doses of the principal drugs in the Austro-German Pharmacopœia on the metric system, side by side with the British Pharmacopœal preparations and doses of the same drugs, will probably be found useful. There is a very good map, with all the watering-places distinctively marked; and the book has the advantage of a copious index.

The Young Doctor's Future; or, What shall be my Practice? By E. DIVER, M.D. London: Smith, Elder, and Co. 1885.—The second edition of this little book brings the regulations of the services fairly up to date, so that a "young doctor" in considering the question of entering a public service, can see at a glance what each has to offer and what regulations are in force concerning candidates. In the part devoted to private practice much excellent advice is given, which if it were generally followed would result in great benefit both to medical men themselves and to their patients. The difficulties and discouragements which must be expected in practice are referred to. On one matter on which advice is often sorely needed by the tyro—the purchase of a practice—the counsel offered by the author, excellent as it is, is exceedingly meagre, and might with advantage be amplified in a future edition.

Our Dwellings, Healthy and Unhealthy. By CATHERINE M. BUCKTON. Illustrated. Pp. 153. London: Longmans, Green, & Co. 1885.—This work consists of a series of lectures, addressed to the girls attending the Leeds Board

schools, on the subject of the essential requisites of a healthy home. It points out very clearly the most prevalent faults and defects of ordinary dwellings, how these may best be avoided, or, when possible, remedied, and the steps necessary to maintain in a satisfactory state the sanitary condition of a healthy house. The information is given in a very intelligible form, and, when acted upon, ought to conduce materially to the health and comfort of those for whom it has been prepared. We should be pleased to find it had a wide circulation among the working classes, as we believe many of them would appreciate the instruction it supplies. The appendix contains some "precautions against cholera" which might, we think, be advantageously reprinted as a leaflet and circulated among the population of our towns; the advice given in it is sound, intelligible, and judicious. The want of an index to the book is to be regretted.

Epitome of the Laws affecting Health now in force in this Country, compiled for the Use of the General Public. By J. V. VESEY FITZGERALD, B.A. London: Waterlow, Bros., and Layton.—Having frequently had occasion to refer to the statutes affecting sanitary matters, Mr. Fitzgerald has found that their provisions are neither accessible nor easily understood. He has therefore, in the little book before us, offered to the public a sketch pointing out their principal rights and liabilities in sanitary matters. Briefly, but clearly, he gives the main objects of Acts relating to buildings, lodging-houses, canal-boats, the removal of refuse, water-supply, river pollution, nuisances, offensive trades, treatment of disease, burials, adulteration, unwholesome food, prisons, &c. Doubtless the work will prove useful to those for whom it is intended.

The Journal of Physiology. Edited by MICHAEL FOSTER. Vol. VI., Nos. 1, 2, and 3. Cambridge Scientific Instruments Company's Works, Cambridge.—These numbers contain the following memoirs:—1. A. W. Hoisholt: Is the Nervous Influence delayed in the Motor Nerve Terminations. 2. C. A. MacMunn: Observations on some of the Colouring Matters of Bile and Urine, with especial reference to their Origin; and on an easy method of procuring Hæmatin from Blood. 3. J. R. Green: The Edible Bird's-nest, or Nest of the Java Swift (Colocalia Nidifica). 4. J. Barrett: Rapidity of Accommodation. 4. J. N. Langley: Physiology of the Salivary Secretion; Part 3, The Paralytic Secretion of Saliva. 5. Gerald F. Yeo: An attempt to estimate the Gaseous Exchange of the Frog's Heart by means of the Spectroscope. 6. G. Yeo and E. Herroun: The Minimal Interval at which the Summation of two Maximal Stimuli occurs in Striated Muscle. 7. H. P. Bowditch: Note on the Nature of Nerve Force. 8. A. Sheridan Lea: Notes on the Isolation of a Soluble Urea Ferment from the Torula Ureæ. 9. J. Blake: Supposed Catalytic Action of Insoluble Reagents.

Quarterly Journal of Microscopical Science. Edited by Prof. RAY LANKESTER, DYER, KLEIN, MOSELEY, and SEDGWICK. July, 1885. London: J. and A. Churchill.—The following papers are contained in this part:—1. On Spermatogenesis in the Rat, by Herbert H. Brown. 2. A Simplified View of the Histology of the Striped Muscle Fibre, by B. Melland. 3. On the Development of a Fresh-water Macrourous Crustacean Atycphira Compressa, De Haan, by Chiyomatsu Ishikawa. 4. On the supposed Communication of the Vascular System with the Exterior in Pleurobranchus, by Alfred Gibbs Bourne. 5. Observations on the Nervous System of Apus, by Paul Pelseneer. 6. Note on the Chemical Composition of the Zoocytium of Ophrydium Versatile, by W. D. Halliburton. 7. The Development of Peripatus Capensis, by Adam Sedgwick.

Lehrbuch der Physiologie. By DR. A. GRUENHAGEN. Seventh Edition. Part VI. Hamburg and Leipsic: Leopold Voss.—In this part the consideration of smooth muscular tissue is completed, and the physiology of sensation in general. Tactile sensations, with their subdivisions of space, pressure, and temperature, gustatory sensation, sensations of smell, and, lastly, hearing, are also successively discussed. The work is well kept up to the standard of the original editions by Wagner and O. Funke.

THE PROGRESS OF CHOLERA IN SOUTHERN EUROPE.

WE ventured last week to express an opinion to the effect that the climax of the Spanish epidemic had at last been reached, and that the next change would probably indicate an abatement. The statistics published during the week ending the 31st ult. have fortunately borne out this view, and the diminution in the number of fresh cholera cases and deaths in the Peninsula has been a substantial one. From nearly 6000 fresh cases and 1800 deaths a day, there has been a fairly steady fall to some 3500 cases and 1000 deaths daily. The climatic changes which have taken place are also favourable, and though it is always somewhat difficult to speak with a great degree of confidence as to the movements of so uncertain a disease as cholera, yet we feel that we may look forward with considerable assurance to a further diminution in the intensity of the epidemic. The mortality has already been very serious. Commencing early in June the disease soon acquired considerable force, and by the end of the month over 6000 deaths from cholera had been officially reported. During the month of July the epidemic, with only very occasional abatements, continued to increase in fatality until the end of the month, when the daily deaths exceeded 1000, the total cholera mortality for the month being not far under 25,000. With the month of August the severity of the epidemic, both as to fatality and area of diffusion, went on increasing up to about the 22nd of the month, at which date the daily number of deaths was varying between 1700 and 1900. Then followed the diminution to which we have already adverted; but the recorded cholera deaths for the month have not been less than some 50,000. In short, during the three months in which cholera has now prevailed in Spain the officially recorded mortality statistics show that not less than 80,000 persons have perished in Spain from the disease, and it is highly probable that this number, appalling as it is, does not represent the true total.

From the south of France the news is, on the whole, somewhat reassuring. At Marseilles, although a steady cholera mortality is maintained, yet the number of deaths has distinctly diminished since the middle of the month. At Toulon, also, there is some abatement of the virulence of the disease, although the infection still clings with some tenacity to the port. The inhabitants of Toulon have also given way to panic, and, both in consequence of this and of an exodus of people, due to other causes, some extension of the disease might readily have been anticipated; but it has, as yet, been only on a small scale. A few cases have occurred at St. Mandrier, at Salon, and at Penne. At least one case occurred somewhat further north, at Valence, in the department of Drôme; a spread to Montagnac, in the department of Herault, is reported; and one case is said to have occurred at La Seyne, immediately to the south of Toulon. But none of these extensions appear, so far, to be serious.

On August 30th news was published to the effect that some cases had occurred at Trivio, not far from Gaeta, and also that cases had been heard of in the suburbs of Naples. The extension to Italy was regarded as having taken place by sea from Marseilles, but no further details have come to hand.

So far as as Great Britain is concerned, the only cholera rumour comes from Leith, where a steamer which left a Spanish port on Aug. 21st, has arrived with some suspicious cases of illness amongst her crew. The vessel is being kept under observation, and, apart from three men who had been ill, no further cause for immediate anxiety is known.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 5, 1885.

THE prominence which is being given to the question of local government, both by the press and by statesmen, seems to indicate that the Parliamentary recess will be utilised with a view of preparing the country for further legislation on this subject in the next Parliament. So much remains to be done in order to establish our system of local government on a thoroughly satisfactory footing, that people are apt to forget how immense have been the strides which have been made in this respect, and how far this country is in advance of other nations in many of the more important matters which are dealt with by local bodies. In some respects we fear that we have either made no advance, or that we have even retrograded. Thus, when we remember that the first piece of sanitary legislation ever passed had to do with the maintenance of a cleanly state of streams, it seems strange that we could quietly have sanctioned that vast fouling of our watercourses which was carried out with the approval of the Legislature under some of the public health statutes passed about the middle of the present century. It has already cost this country vast sums to undo evils which were then brought about, and the state of the Lea, to which attention is now being directed, affords proof that much still remains to be done in this respect. Then, again, as regards such a matter as the slaughtering of animals; this practice was at one time prohibited, under statute, within cities and boroughs, but the prohibition was not maintained, and, judging from reports of officers of health, intra-urban slaughter-houses remain amongst the most fertile of nuisances.

But, for all this, our advance has been substantial, steady, and all but continuous; and as regards those sections of local government which involve medical considerations, THE LANCET may fairly claim that it has, with some considerable measure of success, endeavoured to lead public opinion in the right direction. In many respects our Poor-law system is without its equal, but it is only twenty years ago since we wrote that "the workhouse hospital system is a disgrace to our civilisation," and it is mainly owing to the pressure which the revelations of THE LANCET Commission of that date brought to bear upon the former Poor-law Board that we owe some of the greatest improvements that have been effected. As regards general sanitary administration, the advance which has been made is striking in the extreme. Every district now has a proper staff of officers, including a medical officer of health, and, quite apart from the valuable current sanitary work which is day by day in progress, vast sums of money have been spent by sanitary authorities in effecting permanent improvements, and a large amount of life has been saved in consequence.

In the ten years ending 1858 the General Board of Health sanctioned loans to the extent of £2,956,178 under the Public Health Act, 1848. Under the Act of 1858 and the Sewage Utilisation Act, 1865, the Secretary of State sanctioned loans for £7,363,366. But from the date of the constitution of the Local Government Board in 1871 to the middle of 1884, no less a sum than £29,107,118 was issued by way of loan to urban and rural sanitary authorities. And, taking the last period only, it is worthy of record that since 1871 the "fever" deaths in this country have diminished from over 15,000 a year to about half that number; that the general mortality has fallen from 22 to 19 per 1000, and that these reductions have been obtained notwithstanding an increase of population from somewhat under 23,000,000 in 1871 to nearly 28,000,000 at the present time. These results are the more striking because they have so largely been brought about by local bodies, and because they, in consequence, indicate that the public are being steadily, if slowly, educated to understand that national health is essential to national prosperity. It is almost painful to read, as regards Toulon, now that it is suffering from cholera, that the expenditure of 10,000 francs will be made by the Government for the purpose of cleansing it. Such a system of centralisation is vicious in the extreme; it effaces all sense of responsibility in the inhabitants themselves as to their sanitary surroundings, and it is owing to the abandonment of the principle which this system involves that our progress is mainly due. And fortunately we are rarely at a standstill in this matter. Sewerage and water-supply were, some twenty-five years ago, the most prominent questions in connexion with local sanitary administration; now that these measures have been largely carried out, the provision of means of isolation, the notification of infectious diseases, the preparation of efficient bye-laws, and other similar matters are receiving an equal, if not still more striking, amount of attention.

But, for all this, we still stand in need of further legislative advance. Our overlapping areas and conflicting authorities are a source of much unnecessary obstruction and expense, and it is high time that the long-promised measure of reform in this matter was taken seriously in hand by the Government. Both parties claim that they can best prepare a County Board Bill, but, unfortunately, we have heard the same assertion over and over again for many years past. Some such measure is the more needed because the prospect of its being passed is so often made the excuse for deferring much-needed changes in comparatively minor respects. Thus, the unsatisfactory position in which medical officers of health are now placed as regards their tenure of office receives little or no attention, because the subject may possibly be dealt with in the long-promised measure relating to local self-government.

Whilst therefore we have reason to be proud of the results which have been achieved under our present system of local government, we should be none the less anxious to see it reformed in those particulars in which it has been found faulty, and candidates for seats in the forthcoming Parliament should be required to express their intention of supporting any measure which will give to local bodies, to their officers, and to the public, the rights which experience has shown they are justly entitled to.

AMONGST the many feeble and marasmic products of a timid and time-serving Legislature, it would be difficult to name a more striking illustration than the Habitual Drunkards Act, of which we should forget the existence

were we not reminded of it once a year by the Annual Report of the Inspector of the Retreats established under the Act. Medical men, more than any others, know the extent and the depth of the misery and evil which this Act of the Legislature was meant to meet. They see the insidious stages of alcoholism, and have only too many illustrations of the fact that often, years before a man is recognised by the public as a habitual drunkard, by the closure of his shop, or his appearance in the list of bankrupts or in a police-court, he is, either in a medical or a moral respect, lost, literally soaked and saturated with alcohol, and so hopelessly lost that it is debatable whether it is worth while to try to save him. This class of patients is well described in the fifth report of the inspector, on the fifth page. He divides persons who enter these retreats into two classes:—

"First, those who in consequence of their intemperate habits are the despair and terror of their friends; and, secondly, those who, knowing the danger into which they are drifting, desire to separate themselves for a time from the temptation of every-day life."

The degradation of the first class to which we allude is well described in a moral respect in the report. Medical men would associate such cases with cirrhosis, or atheroma, or albuminuria, or epilepsy, or delirium tremens. From the retreat point of view, he is described as taking every opportunity of obtaining drink, and does not scruple to pawn his clothes, and even to steal sometimes, in order to obtain the wherewithal to gratify his morbid desire for stimulants. The admission of such a patient often proves disastrous to the peace and harmony of the retreat, and sooner or later the licensee is compelled, for the good of his other patients, to take advantage of Section 12 and obtain the refractory patient's discharge by a magistrate." This is the moral portrait of the habitual drunkard: he is capable of lying, stealing, pawning. He is intolerable in a house where there is supposed to be power and strength. He has to be sent back to his own house to terrify the wife and children that he once loved, and they are absolutely helpless to deal with the monster that our craze for personal liberty allows to be made in hundreds, and when made to be at large. The inspector rejoices that the majority of cases in the retreats belong to the second or the better class. But this is poor consolation for the families whose homes, happiness, and business have been blighted by the members of Class 1, the class into which Class 2 falls in a large majority of cases, if not arrested. Well, among the means of arrest is the Habitual Drunkards Act, an Act which was intended to facilitate the separation of drunkards from their drink and their temptations to drink before the stage of utter disintegration and degradation has been reached. From the humane point of view, there is much to be said for the separation of habitual drunkards of the first class described by the inspector. He is not only often an object of terror to those whom he should protect, but his example is demoralising in the highest degree, and his persistence in business is often the ruin alike of the family and the business. Such a miserable sot has no right to be free; freedom for him is a misfortune for himself and for all about him; he is as fit for restraint as any madman in Bethlem. But of course the great use of the Habitual Drunkards Act is in the power to deal sufficiently early with dipsomania to give the victim a chance of cure. And the greatest effort our freedom-loving Parliament has been equal to for the salvation of these cases is to empower the withdrawment of the drunkard to a retreat—on condition that he himself consents! It is very much like empowering the imprisonment of a thief on condition of his assent. The drunkard must actually make the application for admission, and state the time he is willing to remain. In other words, the man who has been drinking his senses and his resolution away is expected to display the highest sense and resolution, and to do the one thing he is most sure not to do. The result is, as might be expected, very slight. The statements and tables of the report are not altogether clear, but, as far as we can make out, there are four retreats reported on for the whole of the kingdom—viz., Hall Court, Cannock, Staffordshire; Colman Hill House, Halesowen, Worcestershire; Dalrymple House, The Cedars, Rickmansworth, Herts; and Tower House, Westgate-on-Sea, Kent. The whole number of patients they are licensed for at one time is sixty-four; and the whole number admitted under the Act in 1884 was seventy-two. This is exclusive of fifteen patients remaining over on December 31st, 1883. This is a self-condemning result of a law meant to grapple with a numerous and most distressing class of cases. When patients are once confined good seems to be done; but seventy-two admissions for the whole country are an absurdly disproportionate number. Mr. GRAY of Cannock says the licensee cannot prevent a patient from going out of a retreat, and complains that as punishment of patients who violate the rules is not enforced, further disobedience is not prevented. Altogether the Act is discreditable and inefficient, and when it comes to expire in 1889 ought to be replaced by one more adequate to the disease and the misery to be averted. An interesting table of particulars of twenty-five (not forty-nine) cases in the Dalrymple retreat is given, from which it appears that in the majority of the cases the education was good. In five of the cases there was insanity in the family; in fifteen cases one or more near relatives were affected with inebriety.

FOUR stages may be recognised in the popularisation of medical knowledge. The medical scientist first of all discovers or differentiates the disease from others with which it has been confounded. A discussion then ensues between the more learned of the profession; next the solid nucleus of acquired new knowledge becomes the property of every medical practitioner; and, finally, the practitioner dispenses it broadcast to the world. So it is that the pathology of the present generation of medical men becomes the pathology of the next generation of lay people; for it takes about a generation of men to popularise scientific knowledge. Alcoholic paralysis is one of those affections which is rapidly entering on the third stage of its career. We should have said that it had already reached its third stage were it not for the questions that continually come before us. In 1852 MAGNUS HUSS treated of the nervous symptoms that occur in chronic alcoholism, and recognised a paralytic form. But he also said that the forms were mixed, so that we might have an anæsthetic complicating a paralytic, epileptic, or even a hyperæsthetic

variety. As to the changes in the nervous system, HUSS knew nothing positively, though he conjectured that the spinal cord and medulla oblongata were involved. The fact that the nervous symptoms tended to disappear when the alcohol was prohibited was also known to him. LANCEREAUX gave a more systematic description of the disease in 1864. LEUDET published some cases of the painful and hyperæsthetic form of the disease three years later, and he also expressed the opinion that the hyperæsthetic variety was of more frequent occurrence than MAGNUS HUSS had supposed. Dr. REGINALD THOMPSON published a case of paralysis of the extensors of the forearm, probably due to alcoholic excess, in the Transactions of the Royal Medical and Chirurgical Society for 1868. But it was in 1872 that Dr. WILKS brought the subject prominently before the profession in England (*vide* THE LANCET, March 9th, 1872.) He had for some years previously observed cases of paraplegia in ladies who were addicted to alcoholic excesses. Dr. WILKS laid stress on the occurrence of severe pains in all the limbs, but especially the legs, which were much wasted. The numbness and anæsthesia were also noted by him, and hyperæsthesia was also mentioned. He regarded the disease as due to an alteration in the structure of the spinal cord similar to that which takes place in the brain in chronic alcoholism. These changes were looked upon as degeneration of the nervous tissues and thickening of the meninges. In 1879 WESTPHAL put on record a case of chronic alcoholism in which the patient walked like an ataxic. LANCEREAUX contributed largely to our knowledge in 1881. He asserted that the disease was more common in women than in men, in the proportion of twelve to three; that the faradic excitability of the affected muscles was greatly diminished or lost altogether. Evident changes were found in the peripheral nerves. Two years later he drew attention to the symmetry of the paralysis, and remarked that the lower extremities were always more affected than the upper, and the extensor muscles more than the flexors. FISCHER came to the conclusion in 1882 that the essential lesion was a subacute inflammation of the grey matter, the posterior columns and the internal portions of the lateral columns of the spinal cord, but he also allowed that a peripheral lesion would account for all the symptoms. Last year Dr. BROADBENT reported some cases of the diseases before the Royal Medical and Chirurgical Society, which were mainly interesting from the renewed light that arose in the discussion, in which Dr. WILKS and Dr. BUZZARD took a prominent part. Dr. BUZZARD pointed out the lancinating character of the pains and the rapid wasting of muscle, which was attended by the signs of the "reaction of degeneration." According to CHARCOT and FÉRÉ, the muscles of the face are never affected. In an excellent article by HUN on the subject, in the *American Journal of Medical Sciences* of April, 1885, may be found a report of two cases of the disease and a *résumé* of the literature, together with some original remarks. HUN thinks that we are justified in regarding alcoholic paralysis as "a special form of disease with the following symptoms: After a number of cerebral and gastric disturbances due to the alcoholic poisoning, the symptoms of the disease proper commence with neuralgic pains and paræsthesiæ in the legs, which gradually extend to the upper extremity, and which are accompanied at first by hyperæsthesia, later by anæsthesia, and in severe cases by retardation of the conduction of pain." The muscular weakness, rapid atrophy of muscles, and great sensitiveness of the muscles to pressure and passive notion are also referred to. He holds that, in addition to the motor and sensory phenomena, there is decided ataxia. The tendon reflexes are abolished, and certain vasomotor symptoms are usually present. Loss of memory and transient delirium are also mentioned. HUN is of opinion that the disease is dependent on degeneration of the peripheral nerves in addition to degeneration of the nerve cells of the cerebral cortex. With regard to disease in the latter situation, it may be urged that the peripheral neuritis is amply sufficient to account for the production of paralysis, hyperæsthesia, pains, and muscular atrophy. It is difficult, as HUN admits, to perceive why the spinal cord should escape in chronic alcoholism; and although positive alterations have not been definitely met with in the spinal marrow, it is more than likely that alcoholism damages its structure. Nor must we forget that Dr. A. DE WATTEVILLE has suggested that a dynamic change, a molecular alteration, of a transient character, in the large nerve cells of the anterior cornua, may be a sufficient cause of degeneration of the peripheral parts of the nerve fibres, which, it should not be lost sight of, are really nothing but distant portions of the nerve cells. In his fatal case HUN observed degeneration and shrinking up of the nerve cells in the cortex and congestion of the pia mater, with effusion of serum into the subarachnoid space. He considered that the ataxia, regarded by him as a sign apart from paralysis, might be due, in part at least, to cerebral disturbance, for "it was associated with tremor, and in its appearance resembled the uncertain movements made by a drunken man, which form of incoördination is probably of cerebral origin." Although we probably now know as much of alcoholic paralysis as we do of many other nervous diseases, there yet remains for it, as for them, the most difficult of all problems—the exact pathogeny.

MR. STANSFELD has given notice of his intention to move early in the next Parliament for the total repeal of the Contagious Diseases Acts. Although the Parliament will be a new one, it is hardly to be expected that all the crotchet-mongers will be eliminated; and, even if Mr. STANSFELD'S place should know him no more, Mr. HOPWOOD, Mr. FOWLER, or some other familiar opponent of these Acts may be present, and will move their repeal. As, however, some of the members who support these Acts, including the present and late Home Secretaries, Lord HARTINGTON, Mr. CAVENDISH BENTINCK, Mr. OSBORN MORGAN, and many others, may also be again returned and strengthened in number, it is possible that not only will Mr. STANSFELD'S motion be defeated, but that the resolution which deprived these Acts of all their value will be rescinded. It is therefore desirable that the public should be reminded of what these Acts have done, not only in reducing these diseases, but also in preventing and reducing prostitution. For the present it will suffice to indicate their effects in checking juvenile prostitution, a subject which is now attracting so much observation. The Royal Commission appointed in 1870, just fifteen years ago, when the Act of 1866 had only been a few

years in operation, reported that "Inspector ANNISS, of the Devonport district, stated that the effect of the reduction of the public women from about 2000 (every one of whom he had registered by name) to less than 600, involved the total disappearance from the brothels and the streets of some 200 or 300 children of from thirteen to fifteen years of age." In one of the dissents from the report, signed by seven of the commissioners, including Dr. WILKS, Dr. G. E. PAGET, and Mr. TIMOTHY HOLMES, the result is given more strongly: "The sad spectacle," they say, "of juvenile prostitutes of tender age, so rife in such localities heretofore, has been greatly diminished, in some instances almost removed." In Appendix A to the report of the Lords' Committee, 1882, is a paper signed JOHN PARES, M.A., Justice of the Peace for Hants, from which we extract the following: "Having lived some years in a garrison town where the Contagious Diseases Acts are in force, the writer cannot but add his earnest conviction of the inestimable value of these Acts, judiciously carried out, in lessening juvenile prostitution. Apart from the other advantages of these Acts, such as the promotion of order and respectability in the place, the diminution in the gross number of prostitutes, the opportunities for rescue of fallen women afforded by the lock hospitals, and the avoidance of disease transmitted to innocent children, the Acts have had a most beneficial effect towards indirectly stamping out juvenile prostitution, and Portsmouth of to-day stands out in this respect in favourable contrast with the same town twenty years ago, or with other cities where the Acts are not in force—notably with London, where, according to the high authority of Mr. HOWARD VINCENT, juvenile prostitution—that is, of girls from thirteen to twenty-one—prevails to a larger extent than in any town in England. At Portsmouth at the present time [1882] there is only one girl on the register under fifteen. We have the high authority of the chief constable of the borough, as well as that of the superintendent of the Metropolitan Police charged with carrying out the Acts, that there is little, if any, prostitution of any young girls in Portsmouth at the present time. ..... The writer is well aware that the beneficial results that have followed the enforcing of the Contagious Diseases Acts are in many cases outside the strict line of duty prescribed by the Acts to the Contagious Diseases Acts' police, but it is one of the great merits of the Acts that the Contagious Diseases Acts' police are as a matter of necessity brought into such close acquaintance with the brothels (which up to the present date are unfortunately tolerated) that they are able to see young girls who have lately entered them, as well as those who are in danger of doing so, and thus render most valuable service in rescuing the former and warning the latter class." All this, taken in conjunction with the report of the Commons' Select Committee, 1882, which appeared in THE LANCET of the 22nd ult., affords irresistible evidence of the effects of these Acts in reducing and preventing juvenile prostitution years before the Criminal Law Amendment Bill was ever thought of. The resolution of Mr. STANSFELD, which was carried by a snatch vote, undid all this good work and left juvenile prostitution to flourish unchecked till now. If the Acts are to be saved from total repeal, the inhabitants of those places to which they still apply should be up and doing. All such candidates as propose to represent those respective constituencies in the House of Commons should be required to vote in favour of the Acts which have proved so beneficial in reducing juvenile prostitution in their several localities. It is only by bitter experience that the public will learn what these Acts have done; the lesson has been now well learnt in Portsmouth and Plymouth, Cork, Chatham, Aldershot, and other places. Do the inhabitants of these districts wish the Acts to be retained? If they do, they must send their representatives to the House of Commons to negative Mr. STANSFELD'S motion and to induce other members to do the same. In this way only can the Acts be retained, and Mr. STANSFELD and his co-repealers be dismissed to keep the appropriate company of anti-vaccinationists, anti-vivisectionists, *et hoc genus omne*.

To speak of "venous embolism" seems almost like using a contradiction in terms; for, with the exception of the portal vein, there are no venous trunks which are fitted for the impaction of emboli, and as regards its distribution the portal vein is analagous to an artery. Yet under certain conditions it would seem possible for embolism to take place even against the ordinary current of blood, as a recent paper[1] by Prof. RECKLINGHAUSEN demonstrates. The occurrence of hepatic abscess following injury to the cranial bones has often been ascribed to such retrograde embolism through the medium of the hepatic vein; but as a rule the thrombi in the branches of that vein contiguous to the abscess appear of more recent formation than the latter, which more probably owes its origin to portal embolism, or to plugging of capillaries with micrococci. It is, however, quite conceivable that under certain states of the circulation true venous embolism should occur. COHN reports a case in point, where the axillary vein became plugged secondarily to thrombosis of the superior longitudinal sinus and concurrently with embolism of the pulmonary artery. Such a case may, as RECKLINGHAUSEN says, be equally well explained on the view that the axillary thrombosis was independent of the cerebral—an instance, in fact, of multiple thrombosis, of which literature affords many examples. In cases where the obstructing material is not a clot there is less room for doubt, and a case is quoted from HELLER where a cancerous plug occupied a small branch of the hepatic vein secondarily to cancer of the cæcum, with lymphatic infection. The instances given by RECKLINGHAUSEN are more conclusive. One was a case of myxosarcoma of the head of the tibia. Six months after amputation at the seat of primary disease, a secondary growth appeared on the fifth finger of the left hand. This also was amputated, but shortly after a tumour appeared in the right groin, and the case ended fatally about thirteen months after the first detection of the morbid growth. The metastatic growths were found to be most widely disseminated, occurring in the dura mater, brain, liver, stomach, lungs, mediastinum, left kidney, and pubes. The subpleural lymphatics were filled with sarcomatous tissue extending from the infiltrated mediastinal glands. The right femoral vein contained masses of the growth, apparently proceeding from the smaller veins. The vena cava and the main trunk of the left renal vein were free, but masses of new growth occupied

[1] Virchow's Archiv., vol. 100, p. 503.

the larger branches of the vein, and spread through them towards the periphery of the organ. These tumours projected into the cavity of the left auricle, and one of them was contiguous to a pulmonary vein, the peripheral portion of which was blocked by what was evidently an embolic plug detached from the tumour. Thus both in the kidney and in the lung there had to all appearance been a metastatic infection through the veins; the secondary masses having been transported in a retrograde direction—in the one case from the vena cava into the left renal vein, in the other from the left auricle into the pulmonary vein. It is suggested that the masses may have become detached during the rise of venous pressure in violent expiration—e.g., by coughing. If such a condition is competent to cause the transport of thrombi or tumour-masses from the femoral vein into the renal instead of into the right auricle, it is not difficult to conceive of a similar retrograde passage from one branch of a vein within an organ into another branch.

Professor RECKLINGHAUSEN holds that it is only by admitting the possibility of true venous embolism that the anomalous distribution of metastatic abscesses in some cases of pyæmia can be explained. He relates in detail a remarkable case, of which we must be content to give only a brief sketch. A young man, the subject of jaundice, died with pyæmic symptoms. The liver was found to be in a state of early cirrhosis; the lungs presented foci of suppuration, and there was an abscess connected with the left epididymis. It may be mentioned that there was no history of gonorrhœa. The spermatic veins contained no thrombi; but the surfaces of the kidneys were studded with minute abscesses, which were especially numerous in the right organ, where also lines of suppuration followed the course of the veins, some of which were tortuous. The two main divisions of the right renal vein contained broken-down thrombi. There was marked pyelitis, with hæmorrhagic clots in the ureter. The renal thrombosis could not, it is maintained, have a local cause, nor could it have been secondary to the orchitis, which occurred on the opposite side, and, moreover, there was no inflammation of the spermatic veins. RECKLINGHAUSEN concludes therefore that the renal suppuration owed its origin to phlebitis of the renal vein, possibly connected with the pyelitis; and that the branches of the vein become secondarily plugged with micrococci from the broken-down thrombus. If this interpretation be correct, it will, he thinks, account for many cases of secondary suppuration in organs, such as the brain and liver, as well as the kidney, following disease or injury in the neighbourbourhood. We need only refer to the frequency with which cerebral abscess complicates caries of the temporal bone, without any apparent connexion by the ordinary arterial channels to account for the metastasis, and think it possible that the admission of the fact of retrograde embolism through venules may explain such obscurities.

In the lymphatic circulation we have sometimes evidence of the transport of particles against the stream. This must occur in all cases where the lymphatics of the lung get infiltrated secondary to abdominal cancer, without any direct extension through the diaphragm. So also in mediastinal cancer, the lung is frequently infiltrated—mostly, it is true, by simple extension peripherally around the bronchi, but in some cases with intervals of unaffected tissue between the primary disease and the secondary growths, suggestive of a transference rather than a mere spreading of morbid growth. Again, in cases of cancer of the stomach or gall-bladder, the portal glands and those around the thoracic duct are often not the only ones affected. Indeed, it is comparatively common for the lumbar and pelvic glands to be involved by, it must be presumed, a retrograde transference of the infecting particles. These and many other instances equally notorious will occur to mind, and suggest that there is room for a more liberal conception of the notion of embolic transit. That such retrograde metastases are exceptions to the general rule governing embolism is of course manifest, but hitherto the very possibility of their occurrence has barely been entertained. Given special conditions, of which it must be confessed we are practically ignorant, and the possibility may become a certainty. At any rate, there is a field of pathological inquiry open, and one, too, which is not dominated by the search for bacterial organisms.

A SERIES of letters have lately appeared in *The Times* on the subject of the abortion produced in domestic animals by the presence of ergot in fodder. The subject of ergot and its action is in a condition eminently unsatisfactory, in spite of the constant use of the drug and a considerable series of chemical and physiological investigations. Ergot is, as is well known, the sclerotium—i.e., the intermediate or "pupal" stage between the "mycelium," the "spawn," or "larval," and the "thallus" or perfect stage—of the claviceps purpurea, a member of the family of parasitic fungi called "claviceps," which infests the pistils of the gramineæ; the claviceps purpurea attacking the secale cereale, or rye. The mycelium infests the pistil at its earliest stage, forming a small flocculent mass of filaments at its base, which grow and invade the whole pistil, forming an irregular whitish body, at the base of which presently appears the sclerotium, which is dark. This continues to grow, and eventually lifts up the withered pistil on its summit. This is the perfect "ergot." The ergot, if exposed to warmth and moisture, cracks, and from the cracks little round bodies project, become raised on stalks, and become "thalli" or perfect fungi, to shed their spores and form the "mycelium" again. Chemically, ergot is a very complex body, and many substances derived from it have received names, but practically we are not yet in possession of the active principle of ergot. On the lower animals its action in sufficient doses has had toxic and even fatal results; in the case of non-pregnant human beings any such effects are of the greatest rarity. Ergot produces spasm of both venules and arterioles, and retards the action of the heart; it also probably causes unstriped muscle to contract in all parts of the body. Thus it increases the peristaltic movements of the intestines, and also those of the uterus. It is this last property which is the cause of the widespread use of ergot. Ergot is popularly considered to be an ecbolic or abortifacient, and to be capable of initiating labour. Whether it ever acts thus is doubtful, and experiments are contradictory. It must also be remembered that abortion is of two priacipal kinds, and that if due primarily to uterine action its essence is the expulsion of a living but non-viable embryo; while, on

the other hand, an embryo killed by any noxious influence is almost always quickly expelled. It is the former of these two actions which is claimed for ergot. Most probably the action of ergot is to produce tonic contraction of the uterus. Whether this acts in producing expulsion of its contents depends primarily on the question whether tonic contraction alone is capable of evacuating the uterus. If the uterus is a closed globe, no dilatation of the os internum being present, tonic contraction is calculated to produce, not expulsion, but incarceration of its contents. This action of ergot is frequently utilised for the purpose of *preventing* abortion, and often with complete success. Again, the same action often produces incarceration of the uterine contents (embryo or placenta) when it is desired to produce their evacuation. If, on the other hand, the uterine globe is weakened in one spot, as by dilatation of the os internum, tonic contraction will cause the intra-uterine pressure to act with advantage at the unsupported spot, and may produce evacuation of the uterine contents. That ergot ever initiates rhythmical uterine pains is probably untrue, though it may strengthen their effect by increasing the tonic intrauterine pressure on which tonic contractions supervene; on the other hand, it is liable to disturb rhythmical action by producing tetanus. To say that it is impossible that ergot should ever produce abortion would be to say too much, as the above remarks will have shown; but it is plain that it cannot be depended upon for this effect, and that this result, when it follows its exhibition, can be otherwise explained. Its use in the induction of (non-criminal) abortion and premature labour is generally known to be bad practice; its use in criminal abortion is probably unsatisfactory, judging from the methods of abortionists which occasionally come before our notice in the courts, and which involve the use of murderous tools which have been in use almost ever since history began.

As regards the subject immediately before us—the effect of ergot in producing abortion in domestic animals,—it must be remembered that the thin, double, intestine-like uterus of these is very different from the thick globular human womb, and that, as experiments on the lower animals only apply to the human subject in so far as they can be proved so to apply (a fact frequently forgotten by experimental physiologists), so also clinical observations on the human subject cannot be unquestioningly applied to the lower animals. The question is most important, and should not be beyond the possibility of elucidation.

THE letters from the Rev. ARTHUR ROBINS, Rector of Holy Trinity, Windsor, and Dr. W. M. COLLINS, late Surgeon Royal Horse Guards—the former of which was published in last week's issue, the latter being inserted in our present number—effectually dispose of the accusations of inaccuracy brought against the statements of our Commissioner in his report on the Sanitary Condition of Windsor. These statements have been made as the result of careful personal inspection of the borough and its environs, and prove but too clearly that insanitary conditions exist in Windsor which should long ago have received the serious attention of the proper authorities. If further evidence were required, it is to be found in the reports of the officers of the Windsor Town Council.

Windsor is one of those old towns built at a time when there was much less regard for the sanitary requirements of human beings than obtains now. By degrees some changes have taken place in the old town, while a new and healthier town has grown around it. But the questions remain whether the improvements in the old town have been commensurate with the requirements of better sanitary knowledge or with the opportunities the local authority has had for bettering the condition of the town; and again, whether the local authority has armed itself with all the power it might possess for the efficient performance of its sanitary functions. The answer to both these questions must be in the negative. As long ago as the year 1868 the Legislature enabled the Town Council to improve areas, either by demolition or otherwise, where dwelling-houses were structurally so imperfect as to be unfit for human occupation. It does not appear that a single improvement has taken place under the Act of Parliament to which we refer. Unless such powers are utilised to their full extent, the changes in an old town must indeed be slow. The whole thought of sanitary administration in Windsor, as represented by the speech of the mayor at a recent meeting and reported in the local journals, is to enable complainants to find a remedy for their wants. The suggestion that the authority by its officers should take the initiative and itself act as complainant is not in accord with this view. Under these circumstances, Windsor might continue for another generation with death-rates in some of its localities which, as at present, are, at the very least, half as much again as the general rate of mortality for the borough, unless some circumstance gave rise to greater activity on the part of the sanitary authority.

It is with this object we have given publicity to the facts, which came to our knowledge as the result of the inspection by our Commissioner. We have no wish to adopt a course which must in any sense be vexatious to those who are concerned in the public reputation of the borough; our sole intention has been to benefit the population by urging the need for improvement of their town.

The systematic inspection, which we hope to see immediately commenced, will doubtless bring to the knowledge of the sanitary authorities the defects which need remedying. A careful study of the powers they already possess will show them that they are not lacking much opportunity for the improvement of unhealthy areas. The immediate revision of the borough bye-laws, which we trust will be no longer delayed, will add further to the Corporation's power for making Windsor as healthy a locality as its site entitles it to be. While the provision of means for isolating the earlier cases of epidemic disease, which may appear among its population, will serve as further security against calamity from this class of malady.

Windsor fortunately possesses among its inhabitants those who are less satisfied with its present condition than are others to whose letters and speeches we have already referred, and to their efforts we must trust for the creation of a public opinion among their fellow-townsmen that will be of more lasting utility than the discussion to which our Commissioner's report has given rise. To their notice we would commend the consideration of those statutory powers by which householders can put the local authority in motion where its action is needed, and of the good which has in some places resulted from the existence

of voluntary associations which have served to educate the people in a knowledge of the advantages resulting from wholesome conditions of life. Such organisations have their influence not only upon the poor, but upon those who administer the law in their behalf.

For our part we shall be satisfied if we have in any degree assisted in bringing prominently before the inhabitants of Windsor the need for more active and efficient sanitary administration in their town.

Annotations.

"Ne quid nimis."

THE DIRECTOR-GENERAL OF THE ARMY MEDICAL STAFF.

WE imagine that the public generally can have but a faint idea of the responsible and often arduous nature of the work that has to be performed by the head of a large medical service. We very much question whether the nation possesses an abler or more conscientious public servant than the present head of the Army Medical Service; and we are quite sure that no post has ever required the exercise of more tact, judgment, varied knowledge, and administrative capacity, than the direction of the Army Medical Department has demanded during the time that Sir Thomas Crawford has occupied his present position. To a man of the Director-General's character it is probable that titular distinctions may not afford the same gratification as to others more emulous of the "guinea's stamp"; but to the profession generally, and to the medical service in particular, it is a source of unmixed satisfaction that eminent public services are not to be altogether unrecognised. Sir Thomas Crawford not only rendered good service in the second Burmese war, but he did most excellent work in the long Crimean war—work which made demands upon his surgical skill and professional acquirements. For these services he received no special reward, but in those days honours were not so freely bestowed as at present. After serving in Central India during the Indian Mutiny, he became head of the Indian branch of the Army Medical Department. As a regimental officer he was most efficient and popular; but in the Director-General's office he was called upon to exercise qualities of another and different kind. He was credited with the possession of a clear intellect and sound judgment, and original views of medical organisation and administration. As head of the medical branch, he acquired a knowledge of the service, and of the characters and capacities of the medical officers in it, that was quite exceptional; and the tact and consideration for others that have always characterised him made him deservedly popular. As Deputy Surgeon-General he subsequently went to India, where his talents and administrative capacity soon attracted notice, and where his sanitary and medical knowledge was turned to account by the Government of India. He afterwards became principal medical officer in Ireland, and subsequently principal medical officer of Her Majesty's forces in India. In the latter capacity he did some thoroughly good work. Under his administration the station hospital system was introduced, together with many excellent and radical reforms in the medical services of that country. The actual and prospective financial saving that his reforms effected formed a striking feature in his administration; and not only was there no sacrifice, but a great increase, of efficiency in the hospital service generally whether for peace or war. For these labours he on more than one occasion received the thanks of the Government of India. As Director-General he has passed through and surmounted many difficulties and anxieties, and it is universally allowed that the medical service has developed enormously under his able rule, and has come out of the late Egyptian campaigns with signal success. Sir Thomas Crawford is an honorary LL.D. of the University of Edinburgh, of which he is a graduate. It is rare indeed for a Director-General to possess at once the confidence and affectionate regard of all his subordinates, but the present occupant of the post is exceptionally fortunate, for he appears to have both.

SANITARY STATE OF ALDERSHOT.

WE have already drawn attention to the necessity for some public assurance of the proper sanitary condition of the camp at Aldershot. The eldest son of the Heir Apparent to the Throne is there undergoing a military training. It is due to the nation that the Prince of Wales, or (as he is abroad) those who represent His Royal Highness in England at the present moment, should see that Prince Albert Victor is not being needlessly exposed to the risk of infection from one of those zymotic diseases said to have been prevalent at Aldershot and the neighbourhood around, and to which the Royal Family is specially liable. Risks have to be run by Royalty in the interest of the people over which they reign; but, in return, the people are bound in duty to see that the members of the Royal Family in the discharge of their duty (often self-imposed) are not needlessly exposed to risks which by ordinary precautions can be avoided. The report of Dr. Sweeting, sanitary inspector of the Local Government Board on the insanitary state of Aldershot and district around, is not yet public, but is said to contain very sweeping charges against the local sanitary authority. Any attempt to keep this report secret is to be deprecated. Both the report and any counter-statement the local authorities may feel called upon to make should be fully known, so that the public may judge for themselves. No locality ought to be so free from suspicion as the surroundings of a military camp in times of peace. It is the very essence of good soldiership that the soldier, whether officer or private, should be physically fit. Good food, sufficient clothing, duly regulated exercise, are of little avail if insanitary conditions are permitted to exist. Delay, such as appears to be threatened by the opposition of local authorities, cannot be permitted under circumstances of military exi encies. We have already referred to some of the difficulties in dealing with the Aldershot district, owing to the nature of the soil; but these difficulties are not insuperable. It is a matter that cannot fail to attract the attention of His Royal Highness the Commander-in-Chief, as the welfare of our soldiers is a question of national concern.

CHOLERA PROSPECTS AT HOME.

EVERY week that now passes places the population of Great Britain in a position of greater security against cholera importation and spread. Not only have the existing sanitary organisations along our coast-line been put into a state of greater efficiency than they ever were in before, but the progress towards autumnal weather is largely in our favour. We may now fairly hope that we shall have no cholera epidemic in this country this year. But we cannot express this opinion with absolute confidence. Paris, which in point of latitude and climate differs but little from many parts of England, had no cholera until November 3rd during the epidemic of last year, and it was when the disease reached that city that the greatest cause for anxiety arose with us; and this mainly on account of the continuous daily traffic which exists between the French capital and our shores—a traffic which is so managed that, for the purposes of cholera importation, it hardly differs from a continuous railway journey such as exists between Marseilles and Paris. But, with the vigilance which is now being exercised, we hope to escape, even if solitary importations do occur. For our

immediate safety we are mainly dependent on a genuine system of medical inspection at our ports, coupled with the provision of proper means of isolation in all sanitary districts, whether on shore or inland, at which first cases may be detected, and the country looks to each sanitary authority to be prepared with such measures of defence.

TREATMENT OF PHTHISIS.

THE unsatisfactory state of the treatment of phthisis and the position of M. Germain Sée as a practical physician may be regarded as sufficient reasons for a reopening of the investigation of terpine as a therapeutical agent. A careful account of M. Sée's study of the subject may be perused in the *Bulletin de l'Académie de Médecine*, No. 30. Terpine is believed to be a powerful agent in modifying the respiratory mucous membrane, and in diminishing morbid secretions. It is said to diminish, and even to cause to disappear altogether, the purulent secretion of catarrhal forms of phthisis. The muco-purulent secretion that proceeds from the bronchial tubes irritated by tubercles and that which comes from the walls of pulmonary cavities are the indications for the use of terpine whenever these secretions are sufficiently abundant to exhaust the patient. Terpine is useful in the hæmoptysis of incipient tuberculosis—that is, before the development of cavities with aneurysms in their walls. In the treatment of catarrhal pneumonia and chronic bronchitis, independent of asthma, that only induce dyspnœa by plugging of bronchi, terpine constitutes the best means of lessening the bronchial hyper-secretion. Its prompt action and freedom from disagreeable physiological effects ought to make it a preferable preparation to those containing impure forms of turpentine. On account of its perfect harmlessness and easy digestibility it has advantages over creasote. The best method of administration is in the form of a pill, or as an alcoholic preparation; the most convenient dose is one gramme. In nervous asthma, whether emphysematous or catarrhal, iodine and pyridine are incomparably superior to terpine. Terpine is a derivative of turpentine; it is the binhydrate of turpentine, and may be represented by the following formula: $C_{20}H_{16}(H_2O_2) + 2(H_2O)$. It is formed by the direct union of its component elements when turpentine is allowed to remain in contact with water.

BURIAL REFORM.

FUNERAL reform may be considered to a large extent as an accomplished fact. The old "trappings of woe" in the shape of scarves, hatbands, palls, feathers, and other unmeaning devices are rapidly becoming extinct, and it may be safely predicted that they will soon be among things of the past; for, besides being unmeaning, they are a heavy pecuniary burden to the bereaved, especially when the deceased happens to be the bread-winner. Within the last few days the Archbishop of York has called attention to a part of the funeral ceremony which still requires reform. Assuming, as we safely may, that cremation (even if it should ever become general, which is extremely unlikely) is still in the far future, it follows that burial must for a long time to come be the mode adopted in these kingdoms for the disposal of our dead. Burial in the earth is indeed so simple and natural that it was the first means adopted of disposing of the dead; and the heathen termed it "being restored to our mother's lap," or "covered with her skirt." And, guided by a natural instinct, beasts have been observed to bury their dead with great care. The original meaning of a cemetery is a resting-place. And yet in too many instances our Christian burial still continues to be a perfect mockery and satire upon the ancient custom, defeating entirely its aim and intention. It would really seem as if burial was the last thing contemplated. The body is still enclosed in the conventional triple coffin, the inner one being soldered over with lead, and the outer one a huge, massive construction of oak or elm, handsomely polished, and with brass furniture mountings. It is, after all, only a very partial reform to dismiss the haberdasher to the enhancement of the upholsterer and brass-worker. Nor is this all. The body, thus carefully sealed up, is placed, not in the earth, but in a bricked grave or vault, with no more earth than the few handsful scattered by the officiating clerk or sexton. And this is called Christian burial! Now, it has been recently pointed out that in the service for the burial of the dead, as used in the Established Church, there is no mention of a coffin, the words used being "corpse" or "body." It is, however, necessary that a coffin should be used, but it should be constructed not with a view to its endurance, but to its perishability. Instead of oak and elm, pitch-pine or some even more perishable wood should be used, and this should be placed in the earth without any intervening bricks or stone slabs. By a universal adoption of this greatly needed reform we should reduce the expenditure of burial, prevent a most unwarrantable monopoly of cemetery space, set a good example to others, and act in accordance with the spirit of our burial service. A more general adoption of the hand-bier in place of the dangerous and unwholesome practice of carrying the body on the bearers' shoulders would complete the reforms necessary to ensure an almost perfect Christian burial.

DOUBLE UTERUS AND VAGINA.

A CASE of double uterus and vagina is described by Dr. V. S. Kemarski in the *Vrach*. The patient was a primipara, nineteen years of age, and was admitted into the Alexandrov Hospital at Kharkov after labour had commenced, the liquor amnii having already come away. On examination per vaginam, a membrane rolled up into a cord was detected which had impressed a deep groove on the cranial coverings. This was a vaginal septum. During the pains a depression could be seen externally in the abdominal wall above the umbilicus, and having an oblique direction downward and from right to left. On the right of this depression or groove the uterus could be seen contracting regularly. On the left there was another tumour, also contracting, but less resistant to the touch than that formed by the uterus on the right side. As the labour advanced, the groove disappeared when the fundus had reached the level of the umbilicus. The appearance then was as of an arch with two horns, the right being larger than the left. Slight hæmorrhage occurred from the orifice of the vagina as the head approached. Support was given to the perineum according to Duke's method, and although the orifice was small no rupture occurred. The fœtal face turned towards the mother's right hip. The trunk was born immediately after the head. The placenta came away spontaneously twenty minutes afterwards. The whole course of the labour, which was under Dr. Kemarski's observation from the entrance of the head into the pelvis to the birth of the placenta lasted about three hours. After the patient had been washed, an examination was made of such parts as were previously rendered inaccessible by the presence of the child. The attachment of the longitudinal septum commenced at a distance of four centimetres from the vaginal orifice on the posterior vaginal wall, and was continued upwards to the pouch of Douglas, across which the septum passed to the posterior lip of the vaginal portion of the uterus. On the anterior wall traces of the attachment were found, the septum having been torn away all along the anterior border during the labour. These traces commenced at a distance of 2·5 centimetres from the orifice, and continued up to the anterior lip of the os uteri. The vagina had been divided into two longitudinal and equal halves in its upper and

middle thirds. The vaginal part of the uterus was single, but traces of division could be detected on the anterior and posterior lips. Within the cervical canal there was an antero-posterior septum, which could be followed up beyond the internal os as far as the finger could reach. It appeared to be thin and somewhat tightly distended, separating the uterus into two unequal halves; the pregnancy had occurred in the right one, which was the larger. A probe carefully introduced entered the right half to ten centimetres, and the left one to seven centimetres. It was difficult to ascertain how far the septum extended, but it seemed probable that it was attached to the fundus, as it was equally tense all over, and the cavities appeared, on being sounded, to be independent one of the other.

MR. ERICHSEN AND THE EDINBURGH AND ST. ANDREWS UNIVERSITIES.

Now that September has come, we may with advantage recur to the electioneering duties that are to devolve on the graduates of Edinburgh and St. Andrews. The effect of Mr. Erichsen's speech and general attitude has been very much greater than his political opponents had anticipated, and have prevailed, we believe, with a large number of the medical graduates. We could imagine nothing better for the great medical school of Scotland, to say nothing of St. Andrews, than that it should be represented by a man like Mr. Erichsen, with no personal interest in the questions of university legislation, but with great experience of scientific and medical education, and with that personal regard for the distinguished leaders of Scotch thought and practice which he so eloquently expressed in his speech. It will be well for the University of Edinburgh in some vital controversies that seem impending if she can have for her spokesman in the House of Commons a man who can speak with authority and independence.

OUR ARMY SURGEONS OF EIGHTY YEARS SINCE.

LORD MALMESBURY in his pleasant "Memoirs" has lately borne the testimony of a statesman to the sound judgment of the practitioner in civil life; and now in his equally fascinating "Autobiography" General Sir George Napier pays the surgeon a not less gratifying tribute in the campaign and on the field of battle. Sir George's experience lay chiefly in the Peninsula, where the conduct of the army medical officers has been most harshly impugned, and his evidence is on that account the more called for and the more acceptable. Referring to the treatment his brother Charles underwent in Lisbon as unworthy of the high standard of British surgical efficiency, he adds, "I am bound to state that if one takes the conduct of the whole medical department of the army during the Peninsular war into consideration, one will find few such large bodies of men who are more distinguished for their kindness, skill, and indefatigable exertions for the health and comfort of the sick and wounded; and, as to danger, the medical officers of the British Army, without exception, have invariably shown an utter contempt for it, and in the execution of their duty will brave death either on the field of battle or—which requires a higher mental courage—in the hospitals of the plague and yellow fever." Coming from a great military authority, who does not spare his brother officers when unequal to the tasks assigned them, this is praise indeed; but what follows is still more in point. "I am," he says, "more particular upon this subject because it is a very general, but a very erroneous and unjust idea in the army to think slightly of the medical man, and to consider their profession as inferior to others, which is a great mistake, for few officers receive so good an education, or are so generally acquainted with science and literature." Sir George was writing in 1828, since which time a great deal has been done to improve both the combatant and the non-combatant branches of the service. "I confess," he continues, "one does sometimes meet a ridiculous puppy of an assistant-surgeon or hospital mate, or even a pompous coxcomb, in the higher departments, yet (and I speak from thirty years' experience) I never met with anything but kindness, generosity, and manly, honourable conduct, combined with skill and judgment, in those medical gentlemen with whom I have served; and you will generally find the surgeon of your regiment a man whose society will be agreeable to you, and whose information, opinions, and experience will be of much benefit to you. I only wish they were better off in pecuniary circumstances, for when I consider the great expense of their education, which they cannot avoid, and the length of time before they obtain the rank of surgeon of a regiment or staff-surgeon, the pay they receive is very inadequate to their deserts, and not equal to what they would most probably have made in private practice, particularly where they have very distinguished abilities. Some of my greatest friends, and men for whom I have the highest esteem and respect, are in the medical department of the army." This is emphatic testimony, occurring as it does in one of the favourite books of the season, passed from hand to hand at a thousand vacation-resorts both at home and abroad.

EXPERIMENTS ON MAN WITH THE MICROBE OF TYPHOID FEVER.

LAST year, and in February last, M. Tayon announced that he had cultivated the microbe of typhoid fever of man. He also asserted that this organism was never harmful to certain animals when injected into the peritoneum. The microbe develops with the same activity, and leads to the same effects, both clinically and pathologically, if the intravenous method be employed. By means of the last method M. Tayon has produced fatal results in adult sheep twenty-four hours after injection. Whilst the injection of minute doses of the cultivation into the peritoneum or venous circulation is so deadly, the subcutaneous inoculation is incapable of causing death. The resistance of guinea-pigs, rabbits, dogs, and cats to powerful doses administered subcutaneously was so pronounced that M. Tayon determined to submit himself to experiment. On May 4th the first injection was made under the skin of M. Tayon's arm at the seat of insertion of the deltoid. The liquid injected was taken from a cultivation fourteen days' old, and that had the power of rapidly killing a young rabbit. Immediately afterwards the same dose of the same injection (one division of the Pravaz syringe) was made on M. Kempff and M. Varennes, students in the School of Fine Art. Each individual exhibited the same local and general symptoms, but the intensity of the symptoms was very different. At the end of an hour redness was observed at the site of the puncture, which was at first limited, but gradually spread so as to reach to the elbow by the third day; much heat and tension with difficulty of movement were also experienced on the fourth day; later the swelling of the arm diminished, and the movements became less painful; nothing but a slight induration remained by the seventh day. The general symptoms consisted of fever, which began from five to six hours after the injection, and lasted scarcely twenty-four hours; insomnia the same night; next day general fatigue, want of appetite, pains in the limbs, and a few liquid stools. On June 13th a second inoculation was made on M. Tayon's and M. Kempff's other arm, and M. Milton Crenderopoulos was also vaccinated. Neither of the first named experienced illness, if a slight swelling around the site of the puncture be excepted; but the last named presented all the symptoms that have been

noted above. Somewhat similar experiments were made two days later on other individuals, who also exhibited pretty much the same phenomena. The author remarks that these results prove that the subcutaneous inoculation of the typhoid bacillus is not fatal in man. He asks whether it confers immunity from typhoid fever. Has the organism that has been subjected to two injections become refractory to the development of the bacillus? These questions he does not attempt to answer.

LONDON CABS.

"IT is announced from Birmingham that a company has been formed to purchase all the existing cabs—about 500 in number—and to replace them with vehicles of an improved type." This paragraph, which has been lately going the round of the daily press, makes us once more ask, How much longer are the inhabitants of London content to rest satisfied with the "growler"? Is there any other city in the world that could produce, and be apparently well content with, such a hideous, uncomfortable, noisy vehicle? Not a word can be said in its favour, except it be that it is a good luggage carrier, which after all is not its sole *raison d'être*. Great pains seem nowadays taken to bring the hansom cab to the highest point of excellence; endeavours even having been made to overcome its disadvantages when used as a closed-carriage. Nobody, however, seems to make any earnest or lasting effort in the way of placing a decent four-wheeled hackney carriage on the streets of London. At the Inventions Exhibition many capital and varied specimens of the hansom are to be seen, but there is no sign of anything whatever in the way of an improved four-wheeled cab. Why not? Surely it would pay. The mere existence of the fusty, uncomfortable, ramshackle "growler" side by side with the almost luxuriously appointed hansom of the present day is proof of a demand for a four-wheeled cab of some sort. The supply, in quality at all events, is abominable. Why it should be so is difficult to say. In these days, when a society is founded for nearly every imaginable purpose, is there no one bold enough to suggest a "Society for the Utter Extinction of the London 'Growler'"?

A FEW FACTS ABOUT TOBACCO-SMOKING.

IN spite of the opposition encountered by our protest against cigarette-smoking, which, it will be remembered, first raised the question about this form of the use of tobacco, it is now generally admitted that we were right and our opponents wrong in the matter. The rapid consumption of the finely shredded leaves very close to the mouth has been proved to render the practice of smoking cigarettes peculiarly objectionable. Moreover, it has been shown that although the use of a tube and the provision of a plug of cotton will lessen the evil, they do not wholly deprive the cigarette of its objectionable qualities. We are not, as is well known, advocates of the disuse of tobacco. If moderately and wisely employed, it is a valuable sedative to the nerves, and has an especially soothing influence in the majority of instances. There are, however, certain properties of the tobacco-smoke which ought to be more generally understood. It is unquestionably in some way a special sedative to the heart's action. We are not in the least surprised to find it stated that a considerable proportion of the boys medically examined for the United States Navy are rejected on the score of "weakness of the heart," and that this should be attributed to the habit of smoking cigarettes. As we pointed out when first directing attention to the subject, the sphygmograph shows a peculiar influence to be exerted by the smoking of tobacco, particularly in the form of cigarettes, on the pulse, partly due to depression of the heart's action, and partly to the loss of vaso-motor tone in the arteries. Those practitioners who do not habitually use the sphygmograph in their daily work, but content themselves with simply feeling the pulse with the finger, may not be aware of this fact. It is a fact, nevertheless. To the sedative action of tobacco on the heart may possibly be due that agreeable sense of quietude and of "cooling" which is commonly experienced when smoking in the heat of summer. The points for which we are now especially anxious to call consideration are these: (1) The influence of tobacco is *apparently* cumulative. A warning sense of excess in the use of tobacco generally comes too late. The pipe, cigar, or cigarette may be laid aside, but the depressing or nauseating effect increases for some time. Nevertheless, there is no valid reason to suppose tobacco, or nicotine, does actually accumulate. (2) Excitation of the nerve centres, as by oxidation, seems to intensify the effects of tobacco when once taken into the system. On going out into the air and breathing quickly, the characteristic sensations are nearly always for a time aggravated. (3) A cigar or cigarette smoked through a fine tube is generally "stronger" in its influence than the same smoked without a tube. These three results of observation and experiment seem to suggest the conclusion that the action of tobacco is topical as regard the nerves, the afferent radicles being first acted upon, and when these are brought under its influence the centres being affected from the periphery. In short, we incline to think tobacco is not absorbed, or if it be, its action is not due to absorption, but that it operates as a peripheral sedative like cocaine, and produces its general effects, as coca stops the sense of hunger by numbing the nerves of the stomach, the central effects being secondary, and to some extent reflex. It is worth while to pursue this subject further. We incline to think that tobacco may be found to have an as yet unsuspected value therapeutically, if we can only arrive at a correct notion of the precise manner in which its effects are produced, and then determine how to use it. Great good would result from the recognition of tobacco as a drug, if only because then its abuse could be restrained. In the old days, before chloroform and the other anæsthetics were discovered, the use of tobacco as a potent sedative to relax the muscles in dislocations and to facilitate the reduction of herniæ was a clumsy expedient. It was speedily abandoned when better stupefying agents were provided. It would, however, have been wiser to investigate the action of the agent more closely, instead of throwing it wholly aside.

AMPUTATION OF INVERTED UTERUS.

AT the Belgian Royal Academy of Medicine Dr. Higguet brought forward the case of a young woman who, immediately after the termination of labour, suffered from profuse hæmorrhage, and, instead of lying still, jumped out of bed and was very intractable, with the result that the uterus became inverted, and defied the efforts of several medical men to replace it. She was admitted into the Hôpital des Anglais at Liège, and after further efforts at reduction, extending over some days, the uterus was amputated by the galvano-cautery, two silk Czerny's ligatures and an elastic ligature being employed. The patient made a good recovery. In the discussion which followed, two speakers said that it should not be supposed that hysterectomy was necessary in all cases of irreducible inversion, as women might live for many years in this condition. One of them, however, mentioned the cases of two ladies who were in this state, but they suffered from hæmorrhages and severe abdominal pain. M. Thiry called attention to the importance of effecting reduction. In this he had had considerable success, sometimes using the fingers alone, and sometimes an instrument which had been described in the Belgian medical press. Dr. Higguet, in reply, stated that in the case he had described the operation

was resorted to as the only means of saving the patient's life. He passed in review the different methods that had been proposed and practised by various authors, mentioning the statistics of West and Denucé, from which it appeared that the employment of the elastic ligature gave the greatest promise of success. He mentioned that of the sixteen cases of hysterectomy published during the last four years, one only had proved fatal, and in that the écraseur was used.

LONDON WATER-SUPPLY.

THE frequent contamination of drinking-water through storage in cisterns is commented upon in his last monthly report by Colonel Sir Francis Bolton, who states that the contamination of water from gases generated by sewage is of far more frequent occurrence than is generally understood, and that there are many instances of direct communication between the waste-pipe and the drain, enabling the air in the latter to escape into the cistern. The obvious method to prevent this pollution is for the waste-pipe to be brought outside each house, and the end left exposed to the air instead of being carried into the drains. Sir Francis Bolton also points out the opportunity which is afforded by the constant supply system for avoidance of drinking stale or contaminated water from cisterns, and he recommends for this purpose that a draw-off tap should be attached to the communication pipe, which conveys water from the street to the house; this tap should supply all the water for drinking and cooking, that in the cisterns being used for washing and flushing purposes. The constant supply system is being very slowly extended over the whole metropolis, but its advantages are so obvious, not only in preventing local pollution, but also in ensuring sufficiency of supply, that it is well for metropolitan sanitary authorities to know how readily this can be procured, the only step required being a letter of complaint to the Local Government Board that the Metropolitan Board of Works has unreasonably delayed making application for such constant supply, or that by reason of the unwholesomeness of such water, in consequence of its being improperly stored, the health of the inhabitants of a district is likely to be prejudiciously affected.

PNEUMONIA TREATED BY INTRA-PARENCHYMATOUS INJECTIONS.

BOLDNESS may certainly be necessary for success even in the treatment of disease. But what shall we say of Lépine's argument in favour of the local treatment of fibrinous pneumonia by intra-parenchymatous injections? (*L'Union Médical*, August 22nd). If, says Lépine, an injection of a few cubic centimetres of a very weak aqueous solution of corrosive sublimate be made into the hepatised lung on the third or fourth day of the disease, in three or four places equidistant a few centimetres from one another, and preferably at the periphery of the lesion, with a view of preventing the extension of the disease the following phenomena are observed: (1) At the seat of infection an immediate diminution of the crepitant râles and tubular breath sounds, which are in part replaced by respiratory sibilance and some larger râles; (2) sometimes, later, a transient exacerbation of the temperature of body; (3) the next day a great improvement in the general condition, and notably a precocious defervescence; and (4) a resolution which, to judge by the persistence of the "souffle," especially in the hepatised parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the intra-pulmonary injections in the doses employed (20 to 25 cubic centimetres of 1 in 40,000 solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than 3 to 4 centimetres, M. Lépine urges that he has not lost a single patient and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphia to the solution. After the introduction of the sharp needle, and before the syringe is fitted on, a few drops of blood are allowed to escape; the injection must not be delayed or the needle will become plugged. When the needle is inserted into healthy lung or into tuberculous lung it does not as a rule yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy dogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area, which was made up of blood and congestive œdema. The lesions were less marked with the 1 in 40,000 solution.

RECENT IMPROVEMENTS IN LONDON.

THE latest police reports on the improvements which have been carried out in London during the past year are in many ways interesting. Not only do they describe the destructive but wholesome cleansing of many of the slums of Holborn, Bloomsbury, and St. James's, but they bear witness to the renovation of these neighbourhoods in the purer form of healthy model dwellings. The poorer population have in this way parted with some chief causes of their sunken condition, and have been enabled to start afresh in the work of life on fairly equal terms with their fellow-citizens. Of their mental and moral gains, which are great, we will not now speak at length. In a physical sense they are no less gains. If ready proof were wanting, we might point to the deep hold which cholera has taken during the last two years on various Continental cities notorious for their defects of hygiene. We do not speak of these in any odious comparison, but as a warning and encouragement to the authorities of our own not yet spotless metropolis. If we travel outside the sphere of infectious disease the gain by such a clearance of rookeries is no less patent. Every illness will progress the better towards recovery when its surroundings are no longer putrid air and squalid discomfort, but a purer and more genial atmosphere. The chest complaints of age and childhood will benefit by the same conditions which banish or arrest the action of fever. Squalid children, such as abound in our back thoroughfares, will have some chance of exchanging their bleached life for one in which the blood is redder, and the muscle less languid. With this improvement in cleanliness, appearing as it does in conjunction with other public movements which tend to increase each person's usefulness by education, and in other ways to render well-doing easier than ill-doing, it may be expected that self-respect will grow in proportion. Thus the thrifty will gain in numbers and influence what is well lost by the far too numerous criminal class.

THE ETIOLOGY OF CHRONIC NEPHRITIS.

AT the meeting of the French Association for the Advancement of Science, M. Lépiné delivered himself of the following opinions on the etiology of Bright's disease. The cases may be arranged into two classes, the first of which is dependent on a habitual dyscrasia, using this word in its widest sense—i.e., any modification in the constitution of the blood. The second class consists of "ascending nephritis," amongst which may be reckoned microbic pyelonephritis arising independently of any previous alteration in the urinary passages, and the real occurrence of which is said to have been proved by the experiments of MM. Lépine and Roux. The relatively tardy elimination of iodine by the urine after its subcutaneous injection is given as a sign of chronic nephritis.

THE BRITISH DENTAL ASSOCIATION.

THIS Association held its fifth annual general meeting at Cambridge on Thursday, Friday, and Saturday of last week, under the presidentship of Mr. Richard White, L.D.S.Eng., of Norwich. Amongst the members present, about 150 in number, were Sir Edwin Saunders, Mr. John Tomes, F.R.S., President of the Royal College of Surgeons of Edinburgh and President of the Association during the past year, Mr. Spence Bate, F.R.S., of Plymouth, Professor Stack, of Dublin, and representatives from all parts of the United Kingdom. The meetings were held in the large hall of the Union Society, which most liberally placed the whole of its commodious premises at the disposal of the Association. At the business meeting, held on Thursday morning, the treasurer reported a balance in hand of over £600, and the honorary secretary the election of some fifty new members during the past year. It was decided that the next annual meeting should be held in London on August 19th, 20th, and 21st, 1886, under the presidentship of Sir Edwin Saunders. The retiring President (Dr. John Smith of Edinburgh) then delivered his valedictory address, in the course of which he deprecated further interference on the part of the Association with the horde of irregular practitioners who prey upon the public, since it was found that the latter was apt to look upon such prosecutions rather as persecutions; the game was not worth powder and shot, and although such cases were irritating, he thought it might be expedient as well as more dignified to ignore them. Mr. R. White, the President elect, afterwards delivered his inaugural address, which was devoted to a consideration of the educational, social, political, and scientific prospects of the dental profession. Thursday and Friday afternoons were devoted to the reading and discussion of papers on subjects of professional interest, whilst Friday morning was occupied with practical demonstrations of various operations in dental surgery and technical processes; these were given in the biological laboratories recently built and furnished by the University. There were also on view in the same building interesting collections of pathological specimens contributed by members of the profession, and of instruments and appliances sent by well-known makers. The usual social element of such gatherings was not absent, the programme including a conversazione at Peterhouse, a garden party at Downing, and a dinner in the hall of Caius College. On Saturday a large party of members and friends took part in an excursion up the Cam to Clayhythe, followed by a visit to the cathedral city of Ely. Thanks to the admirable arrangements of the local committee, and especially to the energy of the local secretaries, Messrs. Cunningham and Rhodes, the meeting passed off most successfully and pleasantly, although the weather was not quite as genial as could have been wished.

CHOLERA.

LETTERS in the daily newspapers have recently asked for instructions for preventing and dealing with cholera, should it make its appearance. We cannot do otherwise than recommend all householders to adopt the general precautionary measures which have been prepared by all the medical officers of health for the district in which the householder is resident. The rules for preventing cholera and dealing with it adopted by the French, English, and American surgeons in Paris, and which have been published in reply to inquiries, contain, under the headings, "preventive measures," "first remedies," "isolation of patients," "disinfection, and precautions against contact," "useful recommendations," many of which might with advantage be observed when cholera has appeared in a household. But the best results would follow if every medical attendant under these circumstances were to constitute himself the health officer of the house in which the disease appears. The details of the extent of isolation, the form of disinfection, and the general precautions against the spread of the disease, are essentially those upon which the medical attendant is best qualified to advise. The precautions against cholera necessarily relate in the first instance to the enforcement of hygienic conditions which prevent the pollution of water, air, and earth with excremental matter; and injury would be done if the public were led to believe that resort to a panacea which can be carried in the pocket was all that was necessary. It has, however, been the rule to recommend all persons in times of cholera to avoid exposure to cold, to avoid the eating of unripe or over-ripe fruit or other unwholesome food, and particularly to avoid the abuse of alcoholic liquors. The condition of the body which enables it to resist the effects of the poison of epidemic disease is perhaps not fully understood; but, apart from any theory, it is but reasonable to take every care to prevent at such a time the lowering of the vital powers.

OPHTHALMIA AND RHEUMATISM OF JOINTS.

DR. ZATVORNITSKI publishes in the Russian *Ophthalmic Review* an account of two cases of rheumatic inflammation of joints following ophthalmia. The first was that of a young man who, while suffering from severe urethritis, conveyed the urethral secretion to his eyes. When the ophthalmia was at its height the wrist became acutely inflamed. The eyes were cured by applications of nitrate of silver. The joint inflammation, after continuing in an acute form for ten days, gradually began to subside so as to allow of the employment of active and passive movements. The second case was that of a newly-born infant in whom ophthalmia appeared in one eye. Through carelessness and want of proper attention the affection extended to the other eye, and lasted for about six days. When the ophthalmia was most acute, it was noticed that the right elbow and wrist became swollen and inflamed, and shortly afterwards the left ankle. The child's temperature was 40° C., and it was very prostrate. The joint inflammation continued for some ten days, after which it gradually subsided. The *Russkaya Meditsina* remarks, in reference to these observations, that the first case may be merely an instance of gonorrhœal rheumatism. This would certainly seem the most obvious explanation. May not a similar suggestion account for the second case also?

THE HOURS OF TRAM-CAR AND OMNIBUS MEN.

PROBABLY none of the public who travel by omnibus or tram-car—except it may be a minority of interested shareholders—will object to consider any reasonable plan by which the unusually long working time of these public servants may be shortened. Sixteen to seventeen hours may be said to make the driver's or conductor's day upon the road. Into this period there enters no regular meal-time, and from the remaining seven or eight hours some deduction must be made for dressing, undressing, and other personal duties, before we arrive at the meagre maximum of six hours which is allowed for sleep and constitutes the sum of leisure. The life itself is one of exposure, of continuous monotony, and of muscular fatigue more tiresome than some severer kinds of labour. Anyone engaged in it should at least in justice to himself have adequate provision made for eating and for sleep. It is difficult to see how regular meal-times could be arranged under the present system. If the men could be got to work in daily relays, after the manner of policemen on duty, this difficulty might, however, be overcome. With regard to the shortening of hours, the necessity is greater. Whether such a change would suit the habits of theatre-goers or others out late at night we cannot say. There can be no doubt that it is required; and we are not prepared

to admit that for this reform also the will to carry it out cannot find an efficient and sufficiently profitable way. The dread of loss stands in the way of almost every new movement designed on philanthropic lines, but it is found in very many such cases to be but a stuffed lion.

QUARANTINE QUESTIONS IN SOUTH AMERICA.

El Monitor Médico, the organ of the Academy of Medicine of Lima, complains that maritime authorities have usually been far too lax in their rules, or at all events in their practice, concerning the arrangements for enforcing quarantine on ships coming from infected ports. Last year, when yellow fever was prevalent in Guayaquil, where it is endemic, free communication was permitted between that port and Callao, the port of Lima; the fact being that the sanitary authorities found that there were some cases of the disease in Callao, and thought that as the fever already existed no advantage could be gained by enforcing quarantine. This view was not accepted by all, and it was opposed in particular by the sanitary "junta" of Lima. A commission, consisting of Drs. Ulloa, Artola, and Becerra was deputed to consider the matter. These gentlemen, in a report just published, agree with the Lima sanitary authority that, notwithstanding the existence of an infectious disease in any locality, it is of great importance to prevent, by means of quarantine &c., the entrance of infection from external sources. They affirm that this has been proved by many circumstances and observations both on yellow fever in South and Central America and on cholera in Europe, instancing the case of New Orleans, where in 1864 the usual quarantine was only enforced on the ships of the commercial marine, when the yellow fever consequently confined itself to the navy. They also quote a report of the Mexican Hygienic Council as saying, "There are years in which yellow fever disappears from Vera Cruz. If, then, a ship coming from Havanah or some other place, having cases of the disease on board, is it not reasonable to suppose that the epidemic would spring up again from the new centres imported into a locality whose general circumstances are so favourable to the development of the disease?"

OVER-PRESSURE AT THE ANTIPODES.

IN a very forcible and convincing pamphlet Mr. Alfred Taylor, librarian to the Tasmanian Public Library and honorary member of the Howard Association of London, has called attention to the existence in the schools of our Colonial Empire, of very serious over-pressure, which he attributes to the pernicious system of payment by results. "Of the number of lads" says Mr. Taylor "who have taken scholarships in Hobart Town, more than one has been consigned to the lunatic asylum. I could point to quite a number who have suffered in body and mind from over-pressure. One candidate for the scholarship broke down before the day appointed for the examination, and for the time I was his close companion. I shall never forget how much he suffered, and what a poor, moping, helpless object the bright boy of former days had become. By entire cessation from mental work and careful treatment he was ultimately restored, and enabled to go up and win the prize he had worked so hard to gain. In another case, a lad, after complaining that his head was bad, fell senseless on the floor and remained unconscious and hovering between life and death for several days—another victim to over-pressure. If all the boys who have to study did the work allotted to them fewer would pass, and more would break down, go mad, or die. But instead of doing it fairly, they come down to the public library and make use of translations, from which they copy page after page. A gentleman told me the other day that when he came to Tasmania and saw the curriculum which boys have to go through in order to win the prizes to be gained under our system of higher education, he resolved that none of his sons should risk the loss of bodily and mental health by competing. A lady said to me the other day: 'A short time ago I sent my grandchild to school. She is eight years old. For a time her lessons were a pleasure to her; I never had to press her to learn them. She is a bright, intelligent child, and after a very short time was advanced to the next class. Then I noticed that her cheeks were often stained with tears. She often complained to me of headache. One day she came to me and said, "Grandmamma, I can't do it." I took the book from her hand, and found to my horror that my darling was expected to learn for next morning a page of statistics which would puzzle an adult brain to remember. I sent for the teacher and, told her that I desired my child to be educated and not crammed." Mr. Taylor quotes the statistics of Dr. Beveridge of Aberdeen (which by the way have not yet received the attention in this country which they deserve), showing that there has been a startling increase in the mortality from brain disease of children at school ages in the eight principal towns in Scotland since the Education Act came into operation.

THE HEALTH OF BRIGHTON.

DR. TAAFFE, the medical officer of health for Brighton, has just issued his report for the second quarter of the present year. The death-rate during this period was but 15·5 per 1000, or, including 10,000 visitors, 14·4. This low death-rate deserves comment, for the rate of the United Kingdom during the same quarter was 19·5. In Brighton the zymotic rate of mortality was also very low, being only 0·56 per 1000, or 3·5 per cent. of the total deaths. During last year the death-rate in Brighton was 18·0, this being fully 2 in the 1000 less than the average death-rate for the ten preceding years. We note with much satisfaction this evidence of improvement in the sanitary condition of Brighton.

BOUCHARD ON CHOLERA.

WHEN naphthalin is administered to patients suffering from cholera the urine is frequently tinted of a violet colour. This circumstance is in strong contrast with the dirty brown colour of the urine that is observed as a rule when patients take naphthalin. This violet colouration is due to the presence of a material soluble in ether. M. Bouchard has not observed this phenomenon in healthy men nor in unhealthy conditions, with the exception of a case of acute yellow atrophy of the liver and another of typhoid fever. M. Bouchard has also observed that the establishment of anuria is accompanied by the production of myosis. The myosis persists as long as the anuria, and both disappear together. This symptom is not peculiar to cholera, but is found in uræmia, no matter what the cause may be. M. Bouchard next discusses the three propositions of Koch: (1) That cholera is an infectious disease caused by the comma bacillus; (2) that the bacillus dwells only in the intestinal cavity; (3) that the bacillus must act by virtue of the production of a poison which is absorbed and determines the choleraic phenomena. Arguing from his experience in the treatment of cholera by naphthalin and iodoform, M. Bouchard infers that the comma bacillus, if it be the cause of cholera, cannot reside in the intestines alone. He quotes M. Chantemesse to the effect that the reagents employed stop the growth of the comma bacillus in artificial media. It is also contended that the bacillus cannot be the agent in the product of the choleraic virus. Presumably, the poison would be present in the intestines in greater quantity than elsewhere, and some experiments were made on rabbits attempting to prove this

point. The impression to be gathered from a perusal of M. Bouchard's papers is that, though his experiments were apparently exhaustive, he yet was not sufficiently careful to exclude lateral errors.

CHLOROPHYLL.

THE green colouring matter of the vegetable world presents as much difficulty to the scientist as the red colouring matter of the animal kingdom. Chlorophyll and hæmoglobin may be regarded as complementary bodies in their behaviour to light and in their chemical action. Iron plays an important part in the colouration and composition of hæmoglobin, and M. Timiriazeff has recently considered that the colour of chlorophyll may be due to the presence of iron in the form of the magnetic oxide (Fe_2O_3FeO). He has noticed that when a solution of faded chlorophyll is acted upon by hydrogen evolved in a nascent state by the action of an organic acid on metallic zinc, the resulting product is perfectly colourless, and, when examined spectroscopically, presents none of the characteristics of chlorophyll. The colourless product, however, gains a green aspect if exposed to the air, and it then acquires all the properties of chlorophyll.

MINERAL WATERS OF PERU.

THE *Cronica Médica* publishes a series of researches by Dr. A. E. Perez-Aranibar on the mineral waters of Peru. Amongst others he mentions the waters of Briogo, which are situated a league and a quarter from the city of Huaraz, and which contain a large amount of carbonic acid and chloride of sodium. They are recommended as digestive stimulants, also in predisposition to pulmonary affections, in rickets, chlorosis, and leucocythæmia. The author believes they would be of service in amenorrhœa. Another highly carbonated water, which contains, in addition, some iron and a trace of arsenic, as arseniate of iron, is found at Lares, in the department of Cuzco. This is largely used by the inhabitants of the neighbourhood as a tonic, and is recommended in menstrual, urinary, and several other affections. Another water in which the inhabitants have great faith is that of Jesus, a league and a half to the north-east of Arequipa. It contains lime, magnesia, and silica, and though its virtues are thought by professional observers to have been greatly exaggerated by the public, they are by no means contemptible, especially in cases of urinary, uterine, and gastric affections.

COCAINE IN SEA-SICKNESS.

IN a preliminary report on some observations upon "cocainum muriaticum," Dr. Manasseïn, of St. Petersburg, gives an interesting account of the employment of the drug in sea-sickness (*Berl. Klin. Wochensch.*, August 31st). He had read of its value in uncontrollable vomiting of pregnancy, and thought it might be useful in sea-sickness. He therefore went this summer on a sea voyage in order to test its efficacy. Among his fellow passengers were two, a man and woman, who were especially prone to the malady. He administered to each of them every two or three hours a teaspoonsful of the following solution: Muriate of cocaine (0·15), rectified spirits of wine (in sufficient quantity), and distilled water (150·0), beginning the administration on starting. That it had a prophylactic effect seemed clear, for in spite of very rough weather for a period of forty-eight hours, both the individuals were for the first time in their lives free from sickness, and enjoyed a very good appetite the whole time. To a child six years old, who began to be attacked with sea-sickness on rising in the morning, the treatment was so effectual that it was able to play about during the day in spite of the storm. The child took one teaspoonful in two doses during the first half-hour, and then half-a-teaspoonful every three hours. Another case was that of a girl, eighteen years of age, who had been sick for twenty-four hours before the drug was given. The case being a severe one, she had a double dose every half-hour, with "truly magical effect"; for after the second dose the patient was able to assume a half-sitting posture, and after the sixth dose she jested and began to complain of hunger. During the rest of the voyage she remained well, although there was much rolling of the vessel. Similar good results attended the use of the drug in three milder cases; and had it not been that his supply ran short Dr. Manasseïn would have been able to make more extended observations. Still, from the experience of these few cases he thinks it justifiable to infer that in the drug we have a certain and harmless remedy against sea-sickness. In the same communication he mentions that he had found "cocainum muriaticum" of great service in arresting the collapse of two severe cases of simple cholera, and thinks it desirable to try its action in cases of Asiatic cholera.

SALICYLATE APPLIED EXTERNALLY.

DR. CAGNOLI mentions in the *Moniteur Thérapeutique* that having as a patient a little boy with rheumatic fever, in whom salicylates produced severe gastric disturbance, he had recourse to compresses saturated with a 10 per cent. solution of salicylate of soda and covered with oilskin, bound round the most acutely inflamed joints. The next day the pain and swelling had disappeared from these and the power of motion had returned to them, while the joints which had not been so treated remained exactly in their previous condition. These latter were afterwards relieved in a similar manner.

TREATMENT OF CHOLERA IN CARTHAGENA.

THE treatment of cholera cases in the prison at Carthagena is carried on according to this plan. At first, when there are only intestinal symptoms, a mixture of bismuth and laudanum is given alternately with generous wine and hot bouillon, each every two hours. When the symptoms become more severe, a hypodermic injection of 45 to 60 minims of a 25 per cent. solution of bromohydrate of quinine is given. Cramps are treated by hypodermic injections of morphia and friction; vomiting and thirst, by morsels of ice, wine, soup, and ice-cream alternately, by the production of diaphoresis, and, if necessary, by the repetition of the morphia injections.

THE ANTI-VACCINATION CRAZE AT LEICESTER.

THE deadlock in the working of the Vaccination Acts in Leicester and the defiance of its unwise inhabitants continue. Of 2404 children born in the last six months only 584 have been vaccinated. The imported cases of small-pox have been few, and as these chance to have been in the case of vaccinated persons the fanatics are strengthened in their folly. With only seven cases and the police and sanitary regulations strengthened by the fear of their vulnerable position, the day of reckoning may be deferred; but it will assuredly come.

IRREGULAR PRACTITIONERS IN BARCELONA.

THE *Correspondencia Médica*, complaining of the position and emoluments of the medical profession in Spain, suggests that though this is partly due to the excessive number of doctors, that is not the only cause. Another may be found in the thriving trade carried on by the numerous quacks, both male and female, with which the country swarms. Someone who had the ingenuity and curiosity to inquire into the daily receipts of the various irregular practitioners

of Barcelona found them as follows:—Seven female quacks made 60, 30, 35, 15, 8, 14, and 7 francs a day; while one American "professor" of the sterner sex pocketed no less than 80 francs in the day.

RESORCINE, ITS USES AND ANTIDOTE.

RESORCINE has, says a Belgian medical journal, been strongly recommended by Julius Andreer as a topical application in diphtheria, in a 50 per cent. solution, also for internal use to the extent of from one to four grammes daily. Dr. Moncorvo, of Rio de Janeiro, also finds the greatest benefit in cases of whooping-cough from the application of a 1 per cent. solution to the glottis. In cases of poisoning by resorcine, Andreer found that, contrary to his expectations, warm baths were useless, and that the best treatment was with the more generous red wines, under which recovery was rapid.

THE *Ensayo Médico* of Caracas is responsible for the following:—"*To Darwinists.*—There has just been an interesting discovery in Paraguay of a tribe of Indians furnished with tails. One day a number of workmen belonging to Tacura Tuyu were engaged in cutting grass, when their mules were attacked by Guayacuyan Indians and some of them killed. The workmen pursued them and succeeded in capturing a little boy of eight years of age. He was taken to Señor Francisco Goleochoa at Posedas, and it was then discovered that he had a tail ten inches long, and has in consequence excited a good deal of interest. The boy says that he has a brother who has a tail as long as his own, and that all the tribe have tails."

AT Arbois, his retreat in the Jura, M. Pasteur is adding the last touches to a method for assuring to animals exemption from hydrophobia. This he will put in practice on his return to Paris, confident that it will also prove efficacious in the case of man. Before his departure for the Jura, M. Pasteur had under treatment a little boy of nine years of age, brought by his parents from Alsace, where he had been knocked down by a mad dog and bitten twice in the haunches, on both legs, and in the hand. It is, we understand, the first time that M. Pasteur has applied his method to the human subject.

THE Valencia Medical Institute offers prizes for essays on the following topics:—1. The Diagnosis and Treatment of Neuroses, Hysteria, and Hypochondria. 2. Question of Osteotomy or Fracture in Ankylosis. 3. Administration of Gaseous Remedies and Electricity. 4. Transfusion of Blood. 5. Discovery of a Disinfectant capable of destroying Microbes without injuring Coloured Fabrics. The essays are to be sent to the secretary by Dec. 1st, 1885.

AT the last meeting of the International Sanitary Council the foreign representatives entered a protest against the Porte sending seven Turkish delegates to take part in the proceedings, and thus swamp the vote of the foreign members. A commission has been appointed to ascertain the precise rights of foreign delegates, and in the meantime the Council has been requested to continue to act as usual.

THE Governor of the Philippine Islands has appointed a commission, consisting of the inspector of mines, a medical man, and a pharmaceutical chemist, to investigate the mineral and medicinal running waters in the islands, and to report on them from the geological, chemical, and therapeutical points of view.

Pharmacology and Therapeutics.

THE REPRESENTATIVES OF DIGITALIS.

M. FALKENHEIM has given an account of the results obtained in Naunyn's clinic with convallaria and helleborine. Contradictory statements have been made by various physicians as to the effect of convallaria majalis in the treatment of cardiac disease. The variability of the composition of preparations of convallaria has been advanced as the explanation of this discrepancy in testimony. Some have used the roots, others the leaves and flowers of the plant in the preparation of infusions or extracts. At Königsberg experiments were made with an infusion obtained from St. Petersburg, and with another prepared from fresh flowers on the spot. The effects of the first infusion on frogs seemed to show that it was more powerful than the second. But even this difference disappeared when, in preparing the infusion from indigenous sources, the petals of the flowers, which represented two-thirds of their weight, were thrown away. It was the infusion so prepared that M. Falkenheim employed in Naunyn's clinic at Königsberg. Ten parts of the flowers were treated with 200 parts of liquid, and a teaspoonful was given every two hours. The addition of twenty parts of mucilage of acacia prevented the laxative effects of convallamarine. None of the eight patients thus treated were disturbed either in their digestions or appetites. Nothing that could be interpreted as cumulative effects were observed. The main conclusion arrived at was that the infusion of the flowers exercises on the heart and circulation a regulatory influence directly proportionate to the dose of convallamarine contained in the infusion. It is, however, admitted that the effects are obtained with less certainty than when the infusion of digitalis is employed. Helleborine is a glucoside obtained from the roots and leaves of different species of hellebore. Leyden and Goertz have given helleborine an insufficient trial. At M. Naunyn's clinic helleborine has been administered in the form of pills containing ·01 of a gramme of the active principle. In strong doses the patients were attacked with diarrhœa and nausea, but effects precisely like those of digitalis were observed on the heart and circulation.

ACTION OF DIGITALINE, CAFFEINE, AND QUININE ON THE HEART.

Contrary to the teaching of Schmiedeberg and others, MM. Talma and Van der Weyde have concluded that digitaline produces a dilatation of the peripheral arteries. This effect is said to be obtained without the intervention of the nervous centres in warm-blooded as well as in cold-blooded animals. Nevertheless, the authors agree that digitalis dissipates circulatory disorders in virtue of its direct action on the heart. A frog's heart that had been depressed by tartrate of antimony was treated with digitaline, and it was ascertained that the cardiac systole was lengthened, whilst the cardiac diastole was abbreviated thereby. Quinine produces the inverse effect—the intravascular pressure diminishes because the cardiac beats diminish in strength and frequency, at the same time that the cardiac rests increase in length, and whilst the peripheral vessels remain uninfluenced. The authors believe that digitaline is an antidote to quinine. They infer from their experiments that ammoniac does not exercise a favourable influence on the heart depressed by quinine, though the opposite result was met with in the heart lowered by antimony. In old people they have proved ammoniac to be a stimulant to dilated hearts when digitalis has failed. Some experiments made on frogs showed that caffeine in large doses could stop the heart in systole; in smaller doses caffeine reinforces the ventricular systole and augments its duration. It is to a less degree than digitalis an antidote to the effects of quinine on the heart. Further, like ammoniac, and better than digitaline, caffeine can recall contractions in a heart paralysed by tartrate of antimony. The general conclusion arrived at is that in some cases of cardiac dilatation digitaline is useful; in others ammoniac and caffeine are better; whilst in yet others none of these drugs are of any service.

URETHRAN.

Urethran has been artificially prepared by Dr. v. Jaksch as a hypnotic that is prompt in its action and is un-

attended with unpleasant effects (*Pharmaceutical Journal*). Chemically it is regarded as the ethyl ether of carbaminic acid. It forms white crystals that are freely soluble in water. Half a gramme was the dose required to induce sleep. This dose was given at 7 o'clock, and was sometimes repeated at 9 P.M., and again at midnight if necessary.

HOPEINE.

The liquid alkaloid "lupuline" has till now been regarded as one of the chief active principles in hops. It appears, however, that hopeine may be extracted from hops, the American kind yielding more than either the English or German sort. Hopeine dissolves in alcohol, and but slightly in cold water. Its chief physiological effect is a narcotic one. Children are more effected by it than adults. The exhibition of fifty milligrammes of the alkaloid caused severe toxic symptoms.

PEPTONATE OF IRON.

M. Robin has recently prepared a peptonate of iron that is said to dialyse perfectly, and not to undergo any alteration when mixed with blood or any alkaline medium.

THE RIVER LEA.

CERTAINLY the river Lea is to be pitied. Many millions of gallons of water are abstracted daily for the supply of the New River Company and of the East London Waterworks Company, while the pure water of which it is thus deprived is replaced by the effluent of the sewage of Hertford, Enfield, Tottenham, and many other places, which all contribute to pollute the stream. The inhabitants of its banks have gradually witnessed the replacement of a clear transparent water by a thick and murky current. They have been driven by degrees from their favourite pursuits of fishing and of boating, and as the result of this year's drought some have been compelled to leave their homes and seek elsewhere a home where they may not be offended by offensive effluvia. The river Lea has gradually been converted into something approaching an open sewer. It is true that the Lea Conservancy Board have in some sort exercised the powers they possess for preventing the pollution of their river; but their powers are limited, while those of nature are not confined by Acts of Parliament. Tottenham alone has increased its population, it is said, within twelve years from 25,000 to nearly 70,000, and the process is still going on. Much of the sewage of this district is said to be chemically treated before it finds its way into the Lea, but the rest is practically little else than in its natural condition. Of the details of what constitutes "chemical treatment" we have no authentic account, but the story is told of a man and a boy practically doing nothing. How much blame must attach to the Tottenham Board is not at first sight obvious; they have certainly sought other means of delivering their town of the enormous volumes of refuse which it daily produces, but without success, and in the end have fallen back upon the opportunity which the Lea affords for relieving them of their difficulty. They have attempted to combine with the authorities of Hornsey, East Barnet, and the Colney Hatch Lunatic Asylum for the formation of a drainage district for the whole valley, by which the sewage could be taken to Barking Creek; later, they have sought the aid of the Local Government Board to procure the co-operation of fifteen sanitary authorities in order that joint action might be taken, but without avail; and finally, they have commenced to improve their own arrangements in order that the sewage might be more effectually treated chemically. More recently still they have supported the Lea Conservancy Board in an effort to induce the Metropolitan Board of Works to permit the sewage of Tottenham to be taken into the metropolitan system. But while these various schemes were under consideration, the condition of the Lea became worse, and the drought of the present summer reduced the long-suffering inhabitants of its banks to a state of rebellion. On Sunday, the 30th ult., the New River and the East London Waterworks Companies determined to forego their right to draw water from the river, and agreed with the Conservancy Board to allow the sluices of the lock-gates to be opened and the river to be flushed. The result we are told, was startling in the extreme. In the morning the water gave rise to a horrible effluvium, while the appearance of the stream was most repulsive; but within two hours of the sluices being opened a complete change came over the scene, and brought back to the minds of those who knew the river in its better days the recollection of those times. There was but one drawback, the leaving of about two feet of foul mud along five miles of the river. But whilst its improved condition was a source of satisfaction to those who desired to see its purity return, the flushing served to accentuate the fact that it was receiving a vast amount of impure liquid from the so-called chemically treated effluent of Tottenham, for, compared with the water of the Lea, the effluent was of a dark yellow colour. The fact remains, that if the Lea is to regain its former position of a wholesome and attractive stream, it must no longer be regarded as a sewer; the districts which now drain into it their so-called purified sewage must find some other means of disposal. How this will be brought about is not quite obvious; but it is probable that, until further powers are conferred by legislation upon the Conservancy Board, they will not be able to fully accomplish the object for which they exist. The proposal of Mr. Charles Russell, that those interested in the purity of the river should combine to proceed against the offenders for creating a nuisance, is doubtless the quickest method by which these Boards will be induced to expend money in adopting a different course than that of polluting the Lea. Whether this should be by the utilisation of the sewage on the land or by the construction of the system of sewers to the Thames we must leave the experts to decide.

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

IN view of the possibility of the re-introduction of this Bill next session, we may notice some of the points bearing on the prevention of disease, especially as affecting the interests of members of our profession. The Bill is divided into seven parts, of which the fifth is headed Mitigation and and Prevention of Disease. In a previous section provision is made for the appointment annually by the Commissioners under the Act of a medical officer of health, "whose duty it shall be to ascertain the existence of disease within the limits appointed to him, especially of all infectious diseases, and to point out any local causes likely to occasion or continue such disease, or otherwise injure the health of the inhabitants, and to point out the best means of checking or preventing the spread of such diseases, and from time to time, as required by the Commissioners, to report to them upon the matters aforesaid, and to perform any other duties of a like nature which may be required of him, as well as all duties pertaining to medical officers under the Public Health Acts." The annual appointment appears to be a great mistake, as it must have a tendency to restrain health officers from bringing under notice cases which they may have reason to believe would be unpleasant to the Commissioners or would involve any considerable expenditure, and therefore probably be unpopular in the borough. Such appointments ought to be deemed permanent so long as the duties are efficiently performed, and removal from them should be subject to the control of a Government central authority, which would not be likely to be affected by local influence or prejudice. The annual tenure would in all probability prevent the best class of men from becoming candidates for the post. It is proposed in Part 5 to enact that "every medical practitioner resident or practising within the burgh shall, within twenty-four hours of the same coming to his knowledge, report to the medical officer of health every case of infectious disease and whooping-cough occurring in his practice"; and for this duty he is to be paid two shillings and sixpence, "if it be found that the diagnosis of such practitioner was correct." Although it is not distinctly stated, this clause would seem to involve the verification by the medical officer of health of every such case reported to him. If so, this appears to be a most objectionable proviso, and one which might prove most injurious to the practitioner; and in burghs where the health officer is permitted to practise it would be most unreasonable to expect it to be car-

ried out. It might involve the absurdity of having the diagnosis made by a practitioner of high professional standing and scientific acquirements verified by a junior in every respect his inferior! It might also open the door in some instances to the unjustifiable depreciation of a practitioner by an unscrupulous rival. Such cases would, we believe, be very rare; but we think there should be no ground on which even a suspicion of such a thing could be founded. The diseases included under the term "infectious" are defined to be "cholera, small-pox, typhus, typhoid, scarlet, relapsing, continued, and puerperal fevers; measles, scarlatina, and diphtheria; and such other disease as the Commissioners, with the approval of the Board of Supervision, or Her Majesty by Order in Council, may from time to time declare, for the purposes of this Act, to be infectious." It is somewhat difficult to understand why whooping-cough was not included in the list of infectious diseases, but was specially named in the Act, or why scarlet fever and its synonym scarlatina are stated separately. In cases where no medical practitioner has been called in, the duty of reporting the existence of infectious disease devolves upon the occupier, or the person having the charge, management, or control of the building in which it has occurred, or the head of the family resident in it. While there is a penalty not exceeding forty shillings incurred by the medical practitioner who neglects to report any such case which comes under his care, no penalty is attached to such an omission on the part of the householder or head of a family. This is undoubtedly a mistake, as it holds out an inducement to avoid calling in medical aid in suspicious cases, in the hope of escaping the troublesome proceedings involved in the processes of disinfection. It would appear advisable that heads of families should be compelled to report all cases of infectious disease in their houses under a penalty for non-compliance. The insertion of such a clause would tend materially to diminish the chances of the disease being spread. The Act will empower the Commissioners to provide nurses for attendance on infectious cases, hospitals to which cases may be transferred, compulsorily if necessary, by order of the medical officer of health, and houses of reception to which persons who have been exposed to infection may be removed, for a period not exceeding fourteen days, while their houses and all their bed and body clothing are being cleansed and disinfected. Provision will also be made for the erection of mortuaries, the prompt burial of persons who die of infectious diseases, the prohibition of wakes in such cases, and the disinfection of conveyances which have been used for the removal of patients, or the transport of the dead bodies. Children who have been suffering from infectious disease, or who reside in a house where such disease exists or has existed, are not to be permitted to attend school until they procure a certificate from the medical officer of health, which he must give free of charge, or from a registered medical practitioner, who shall be paid one shilling for it by the Commissioners, that they are free from disease and infection, and that the house and its contents have been satisfactorily disinfected. Parents and teachers knowingly contravening this rule will be liable to a penalty. Regulations are also made for the prevention of the washing, selling, or pawning of bedding or clothes which have not been previously disinfected; for the inspection of water cisterns and drains; and for the control of the sale of milk from infected farms or dairies. With a view to facilitate inquiries into the effect of the milk-supply in spreading infectious disease, the Commissioners, upon the payment of a small sum, may require from any cowkeeper or purveyor of milk a nominal list of the persons furnished by him, and they will have the power to prohibit the sale of milk from an infected dairy or farm till it is certified by the medical officer of health that the "premises are free from infection and in a proper sanitary condition, and that the sale of milk from such place may be safely resumed."

PROFESSOR LASKOWSKI, of the University of Geneva, who is probably the most successful embalmer in Europe, is reported to use an injecting liquid consisting of a mixture of carbolic acid, chloride of zinc, and corrosive sublimate, with the addition of an odoriferous essence. This solution is as clear as crystal, and pleasant to smell. A body skilfully treated by Prof. Laskowski's method assumes "the natural and agreeable expression" it bore immediately after death, and the skin becomes firm and as white as Carrara marble.

THE CHOLERA IN SPAIN, WITH REFERENCE TO THE WATER-SUPPLY OF SOME OF ITS CITIES.

THE appalling statement that 82,000 people have already died in the Peninsula is hardly realised in this country in its full meaning. Considerable attention was at one time drawn to the subject owing to the experiments of Dr. Ferrán of Tortosa, and some enthusiasts were led to believe that a second Jenner had arisen. But we confess, with regret, that we are still as far as ever from a solution of this terrible problem. In this article we will endeavour to see what practical lessons we in England can learn from the experiences of the present epidemic. Everyone is agreed that the water-supply, soil, site, surroundings, drainage, &c., exercise a more or less powerful influence in propagating or intensifying the spread of the disease, and anyone acquainted even superficially with the country will at once be struck by the comparative immunity of some cities and districts and the frightful mortality in others. We will take the water-supply for example. There are only three cities in Spain with a water-supply worthy of the name—viz., Madrid, Seville, and Barcelona. The capital possesses the inestimable gift of a pure and bountiful supply from the Guadarrama range of mountains, which is brought by the Zatella canal a distance of sixty miles. Since cholera appeared in May last the use of any other water has been strictly prohibited by the local authorities. Now Madrid is by far the most populous city in Spain—containing about 500,000 inhabitants,—yet, though cholera has been present for three months, it has never reached alarming proportions, nor does it at present show any sign of doing so; twenty fresh cases daily being rather a high average. Again, Seville, so well known to English travellers, has just had a fine system of water-supply constructed at considerable expense by a well-known English engineer; the population is about 140,000. So far no cholera has appeared; but, should it unhappily do so, we have no doubt that, like its sister city Madrid, it will enjoy comparative immunity. Whilst on the subject of Seville, it is curious to note that in former days it possessed a fair water-supply conferred by the Moors, and Mr. George Higgin, an English engineer, has published a most interesting pamphlet on the subject, showing the wonderful architectural genius and capacity of Spain's former masters. It dates back to the twelfth century, and was last year in a perfect state of preservation—a standing monument of the hydraulic genius of the Saracens. The waterworks, however, which have just been constructed have swept away all the old system. The new reservoirs are situated near the town of Alcalà, a short distance from Seville, whence the water is distributed by a 21-in. main to the city. Thus Seville, owing to the enterprise of an English company and the skill of an English engineer, possesses a water-supply which any city might well imitate.

We now come to Barcelona, the thriving and prosperous capital of Catalonia—the Manchester of Spain, as it is called. It contains a population of 200,000, is well situated, and has a delightful climate. Cholera appeared here last autumn; it never spread to any extent, and died out during the winter. It has lately reappeared in a slight degree, and being situated on the high road to France, by which route all the fugitives from the infected provinces of Valencia, Murcia, and Castellon endeavoured to escape, the wonder is that it has not appeared sooner. Barcelona obtains its water from four different sources: from the Rio Subrigat, on the south side of the city; from the Rio Basos, on the north side; from the Matàro, a spring also on the north side; and, lastly, from wells within the city. With the exception of the Matàro and the wells, the supply is uncertain and apt to run short in summer (it is needless to say what a well-supply means), therefore the city cannot be said to have a satisfactory system—certainly nothing to be compared with either the capital or Seville. Whilst on the subject of Barcelona, we may mention the fact that the local authorities from the very first showed themselves determined opponents of the land quarantine, which at one time was sought to be imposed on them, thus

showing themselves—as they undoubtedly are—the most enlightened people in Spain. If we now turn to some of those cities that have been most severely smitten, such as Aranguez, Valencia, and Granada, we shall find that the water-supply is entirely from polluted sources. Aranguez, the chosen retreat of the Spanish Court, is some thirty miles from Madrid, and contains a little over 8000 souls; towards the end of June and beginning of July a frightful outbreak of cholera occurred, over 200 cases happening at times within twenty-four hours. The inhabitants get their water either from wells or from the Tagus, on which the city is built. It is stated on eminent authority that the drainage of Madrid was directly responsible for the calamities of Aranguez. The sewage of Madrid (where cholera existed about this time) is discharged into the Manzanares. The Manzanares flows into the Harrama, and the latter falls into the Tagus close to Aranguez, thus affording a more or less indirect means of contaminating the smaller town.

We now come to the beautiful city of Valencia, whose name has acquired a sad notoriety this year in the Peninsula, though at last it has come to show a clean bill of health. Built on the Guadalaviar, or Turia river, its water-supply is unsatisfactory. It is from two sources—from wells which are situated in the enclosure of each building, generally near the closet drain, so that pollution by filtration is unavoidable. This well water is not supposed to be for either cooking or drinking purposes, but it is often used for both. The other source is from the river Turia; but as this is liable to pollution and is somewhat limited in its supply, it cannot be depended on.

Granada, which next to Aranguez has suffered out of all proportion to its population, is, if possible, worse off than either of the places we have just mentioned, and, notwithstanding its elevation and temperate climate, has been only too fertile a soil for the dread disease.

In a future article we will consider the drainage, soil, site, &c., of some of these Spanish cities, and we have no doubt that an examination of them will demonstrate the vast importance of attending to sanitation and hygiene in the face of a terrible pestilence.

THE LATE EARTHQUAKE IN KASHMIR.

MR. A. NEVE, F.R.C.S., has favoured us with the following account of casualties resulting from the recent earthquakes in Kashmir:—

The shocks began on the night of May 29th, the most severe one being the first. Most people were thus aroused from their sleep by the fearful earth convulsions. The greatest damage did not necessarily occur where there was most loss of life. This depended on the way in which the houses were constructed. Some mountain villages consisted of flat-roofed houses covered with an immense thickness of earth, with but a single door of exit from the large single room in which cattle and human beings were crowded together. In such scarcely a tithe escaped. The population was almost annihilated. But the ordinary Kashmiri villages, built of light wooden framework, two-storeyed, did not suffer so severely. In either case, however, the proportion of those killed outright to those wounded was very great. The number killed is estimated at about 3200. The wounded will scarcely have exceeded 300. At Sorinagar, the capital, a number of houses fell, including both infantry and cavalry barracks. Eighty-seven men were killed, most of these being buried in the ruins; four hours after the accident some were dug out still alive. Few of the bodies showed much external sign of injury. The wounded included very few lacerations or fractures, but many of injury from crushing or pressure. They were attended to by the staffs of the Government and mission hospitals, and removed to the former under the care of Surgeon A. Leahy, F.R.C.S. Towards the outlet of the valley the damage was greater. Within a radius of ten miles from Baramulla 2000 were killed. Temporary hospitals were erected at Soper and Baramulla, the latter under the care of Dr. H. D. M'Culloch and myself. At the hospital 140 cases were registered, and many more came under our notice when scouring the country. The following is a brief digest: There were 40 cases of fracture, 31 of which were simple; of these, 10 were of the clavicle, femur 7, spine 4, scapula, pelvis, and other bones 1 each. Of the compound fractures, 4 were of the tibia, 2 of the radius, thigh 1. All these were set with plaster-of-Paris. None were seen till the fourth day, and many not till the fifteenth day after the accident. A considerable quantity of callus had been formed in some, and three fractures of the clavicle were thus healed without any bandaging. In no case did ununited fracture result; those in which it seemed most probable at the time had been tightly bandaged at the seat of fracture by the natives. Death followed the pelvic fracture, the bladder being also ruptured; also two of the spine fractures. Two other cases in which spinal fracture had been diagnosed remained paralysed while under observation. The compound fractures all did well except two, in both of which amputation was refused by the patient or her friends. These were very severe compound comminuted fractures of the thigh and the leg bones. Both are still in a critical state, but recovery is hoped for. Dislocations included 4 of the hip (two dorsal, two sciatic), all of which were reduced by manipulation; 2 of shoulder, wrist 1, clavicle (sternal end) 1, acromial end 1. Contusions or prolonged pressure on nerves led to local paralysis of hand or leg in 5 cases, of the spine to paraplegia in 4 cases. All these did well, but the final result is not known in all. External urethrotomy was performed in 2 cases, and cystotomy in 1, for rupture of the urethra. One punctured wound penetrated the bladder as in the operation of perineal lithotomy. Two cases of gangrene were brought in: one died just after arrival; the other was removed, to avoid amputation. Two cases of tetanus with lacerated gangrenous wounds were brought to us. Amputation of the hand was at once performed in one, but the patient died of lockjaw within eighteen hours. In the other, as the man was very weak, we had recourse to section of the sciatic nerve. His symptoms were all relieved, but he gradually sank four days after. The proportion of contusions to lacerated wounds was very large. All these recovered. The treatment was, as far as possible, by Listerism, and in open lean-to sheds; there was no appearance of any erysipelatous inflammation; doubtless the simple diet of the patients favours rapid recovery. Altogether at Baramulla Hospital seven patients died, as above noted; this was out of a total number of over 100 with severe wounds or fractures, many of which were complicated or had been quite neglected until brought in by our clerical colleagues, by coercion if needed, from remote villages. It does not speak well for native surgery that after the first fortnight no wounded could be found in the villages, as all the severely wounded had died. Filth and starvation must share the blame, for often the patient is only allowed sherbet to drink and nothing to eat. Now, two months since the earthquake occurred, shocks are still felt, but they are unattended by any loss of life, as the population have abandoned their houses.

Kashmir, July 20th, 1885.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5439 births and 3133 deaths were registered during the week ending the 29th ult. The annual death-rate in these towns, which had declined in the preceding three weeks from 21·8 to 19·7 per 1000, further fell last week to 18·4. During the first eight weeks of the current quarter the death-rate in these towns averaged 19·9, against 21·7, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 13·7 in Bolton, 14·6 in Leicester, 14·9 in Norwich, and 15·3 in Nottingham. The rates in the other towns ranged upwards to 23·6 in Portsmouth, 24·5 in Salford, 24·7 in Plymouth, and 27·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined from 930 to 697 in the preceding three weeks, further fell last week to 653; these included 374 from diarrhœa, 89 from measles, 85 from whooping-cough, 49 from "fever" (principally enteric), 27 from scarlet fever, 23 from diphtheria, and 6 from small-pox. These diseases caused the lowest death-rates in Bradford and Halifax, and the highest in Cardiff, Portsmouth, and Preston. The annual death-rate

from diarrhœa averaged 2·2 per 1000 in the twenty-eight towns last week, and showed a further decline from the rates recorded in recent weeks; it ranged upwards in the several towns to 5·6 in Salford, 5·8 in Portsmouth, and 9·4 in Preston. The greatest mortality from whooping-cough was recorded last week in Blackburn, Cardiff, and Derby; from "fever" in Sunderland and Portsmouth; and from measles in Derby. The 23 deaths from diphtheria in the twenty-eight towns included 14 in London and 2 in Liverpool. Small-pox caused 15 deaths in London and its outer ring (excluding 4 recorded in the metropolitan asylum hospital ships), and 1 in Manchester. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding twelve weeks from 1389 to 347, had further fallen to 310 on Saturday last; the admissions, which had been 44 and 41 in the previous two weeks, were last week 43. The deaths referred to diseases of the respiratory organs in London, which had been 162 and 165 in the preceding two weeks, rose to 201 last week, and exceeded by 36 the corrected weekly average. The causes of 62, or 2·0 per cent., of the 3133 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Norwich, Plymouth, and Cardiff. The largest proportions of uncertified deaths were recorded in Bolton, Oldham, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·4 and 19·6 per 1000 in the preceding two weeks, further declined to 18·0 in the week ending the 29th ult., and was slightly below the mean rate during the same period in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 10·0 in Perth and 14·2 in Aberdeen, to 19·3 in Paisley and 21·1 in Glasgow. The 440 deaths in the eight towns included 41 which were referred to diarrhœal diseases, 9 to whooping-cough, 7 to "fever" (typhus, enteric, or simple), 7 to diphtheria, 2 to measles, and not one either to small-pox or to scarlet fever; in all, 66 deaths resulted from these principal zymotic diseases, against 116 and 81 in the preceding two weeks. These 66 deaths were equal to an annual rate of 2·7 per 1000, which was 1·1 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœal diseases in the eight towns, which had been 64 and 53 in the preceding two weeks, further declined last week to 41, and was considerably below the number in the corresponding week of last year; 25 occurred in Glasgow, 5 in Edinburgh, and 4 in Paisley. The annual death-rate from diarrhœa in the Scotch towns last week was 1·7 per 1000, while it was 2·2 in the twenty-eight English towns. The 9 fatal cases of whooping-cough showed a further decline from recent weekly numbers, and included 5 in Glasgow. The 7 deaths attributed to diphtheria exceeded by 4 the number in the preceding week; 4 were returned in Glasgow and 2 in Edinburgh. The 7 fatal cases of "fever" also showed an increase, and included 5 in Edinburgh and 2 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 43 and 51 in the previous two weeks, further increased last week to 55, but were slightly below the number returned in the corresponding week of last year. The causes of 62, or 14·1 per cent., of the 440 deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had risen from 19·8 to 27·2 per 1000 in the preceding three weeks, declined again to 20·1 in the week ending the 29th ult. During the first eight weeks of the current quarter the death-rate in the city averaged 22·8 per 1000, the rate during the same period not exceeding 19·9 in London and 15·8 in Edinburgh. The 136 deaths in Dublin last week showed a decline of 48 from the high number in the previous week, and included 11 which were referred to the principal zymotic diseases, against 18 in each of the preceding two weeks; 7 resulted from diarrhœa, 1 from scarlet fever, 1 from diphtheria, 1 from whooping-cough, 1 from "fever," and not one either from small-pox or measles. These 11 deaths were equal to an annual rate of 1·6 per 1000, the rate from the same diseases being 3·4 in London and 2·7 in Edinburgh. The fatal cases of diarrhœa, which had been 5 and 7 in the preceding two weeks, were again 7 last week. Only one death from fever was recorded in Dublin last week, against 7 and 4 in the preceding two weeks; and the fatality of scarlet fever was less than has prevailed in any week since the end of May last. Nine inquest cases and 5 deaths from violence were registered; and 44, or one-third of the total deaths, occurred in public institutions. The deaths both of infants and of elderly persons showed a decline from the numbers in the preceding week. The causes of 25, or more than 18 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE SANITARY CONDITION OF WINDSOR.

To the Editor of THE LANCET.

SIR,—In the letter addressed to you by the medical officer of health for Windsor replying to the report on the sanitary state of Windsor, published in a recent number of THE LANCET, I notice the following paragraph:—

"Here is a specimen of reckless assertion. It is said that a man suffering from small-pox (a year ago) was allowed to walk abroad while the *disease was at its most infectious stage*. The fact is that the regimental surgeon in attendance gave it as his opinion that the man could not be said to be infectious at all at the time. I own I was surprised, but I suppose the doctor was right, for nobody in fact suffered."

As I was the regimental surgeon who had charge of the case of small-pox in question, I beg to state that I never gave it as my opinion that the man could not be infectious at the time. He was convalescent from the disease, but was certainly liable to infect others.

I can bear testimony also to the accuracy of the facts stated in THE LANCET report about the occurrence of small-pox in the Royal Horse Guards. The disease was undoubtedly communicated to the regiment from a case in the civil population, which was treated in his own home, in the very centre of the town, and to which the trooper who first took the disease had access. This latter case proved to be a most malignant form of the disease, and the man's life was in the gravest peril. It necessitated the removal of the sick from the regimental hospital and their being treated elsewhere. The entire regiment, officers and men, had to be revaccinated, and a fever nurse was brought down from London specially to look after the man, all of which entailed considerable trouble and expense to the regiment, and was the outcome of proper precautions not having been taken by the civil authorities in the first instance against the spread of the disease. The other man, whose case has been quoted, who subsequently contracted the disease, being an officer's servant and a civilian, had to be treated in his own lodgings in a thickly populated square close to the barracks; and though the responsibility of his case properly devolved upon the civil authorities, he had to be taken charge of by the regiment, as there was no provision at Windsor for the treatment of infectious diseases. The man, finding his isolation irksome, gave his attendant the slip one day, and made his escape while the eruption was still on him, and went into the town of Windsor, where he spent the day visiting his friends, till he was discovered and brought back. The police, who heard of the circumstance, then threatened to prosecute the man for thus running the risk of spreading the disease!

I venture to think, Sir, that these facts dispose of the charge of "reckless assertion" in this particular instance made by the medical officer of health for Windsor against

THE LANCET report, and justified the censure conveyed therein against the sanitary authority of Windsor for neglecting to provide a hospital for infectious cases.

I am, Sir, yours faithfully,

W. M. COLLINS, M.D.
Late Surgeon, Royal Horse Guards.

Cluny Castle, Aberdeen, Aug. 23rd, 1885.

To the Editor of THE LANCET.

SIR,—As you have permitted Mr. Robins and your special correspondent to repeat with increased emphasis charges affecting my own reputation, I must ask you in courtesy to permit me briefly to answer them.

The accusation which is now most vehemently insisted upon is that I have refused to condemn certain houses in South-place as unfit for habitation; and, indeed, my gentle critic (who very properly protests against the use of strong language) finds in that refusal evidence of "appalling" immorality. But the question is a judicial one, and my opinion is that a court of justice would not order such houses to be demolished. These ten cottages are built against a dead wall (surrounding a garden); but they are only one room deep. They are in a tolerably good state of repair, and every room has a fireplace and a sash window. The closets, ashbins, and washhouse, of which they have the right of use, are situated in a yard at the opposite side of the court. Defective these houses certainly are, but I cannot pronounce them to be dangerous to health. Indeed, there is no evidence that the health of their inhabitants has, in fact, suffered.

Another charge is that of neglect in not causing the water of all private wells in the town to be periodically analysed at the public expense. It must be remembered that most of these wells belong, not to the cottages, but to the houses of the well-to-do class; and also that it is not suspected that sickness has resulted from the use of impure water. Why should ratepayers, who are themselves content to buy pure water, be taxed for the benefit of their neighbours who choose to incur risk in avoiding that expense? The suggestion is a preposterous one.—I am, Sir,

Your obedient servant,

Park-street, Windsor, August 31st, 1885. EDWARD CASEY.

To the Editor of THE LANCET.

SIR,—I am thoroughly acquainted with the town of Windsor, having lived in the neighbourhood all my life, and know every corner of its slums, and can testify to the truth and impartiality displayed by your Commissioner in the report of his investigations. The insanitary condition of the dwellings of most of the poor renders them always liable to epidemics of one kind or another. Were the cholera to visit us, it would in all probability settle, as it did before, in the Bier-lane district, the lower part of which is subject to floods, as well as other defects pointed out by your Commissioner, and this locality is not a hundred yards from that part of the Castle known as the Curfew Tower.

What would our Corporation, now so dull to all remonstrances, say about their vanishing trade then, under the effects of a visitation of cholera? The prevention so far as human agency is concerned is in their hands, and the time for action is the present. I remember some years ago that the Court was kept from Windsor by an epidemic of small-pox in Bier-lane, and that a regiment of household cavalry was ordered to remain in London, as Windsor was on that occasion considered an infected place. When the Blues were last quartered here there was a case of small-pox in the regiment, and for the want of a hospital for contagious diseases this case could not be "isolated," and so great was the deficiency considered, that the Foot Guards had to supersede the Blues, and take over their duties at the Castle lest the household there should suffer from contagion.

But enough has been said and written to convince the public that the homes of the Windsor poor are for the most part, as you point out, a shame and a scandal. To get rid of this disgrace and danger one man, the Rev. Arthur Robins, has struggled for years with all his might, despite the obloquy and abuse thrown upon him. I always knew he would win, but now that THE LANCET'S Special Commissioner has visited Windsor, and pronounced that Mr. Robins is right, and the Corporation wrong, I hope that he will not be left to fight the battle all alone, but that many who think with him will give some expression to their thoughts. The remedies suggested by the Rev. Arthur Robins are for the good of the neighbourhood, and he deserves the thanks, not only of the Court and the town, but of the country.

I am, Sir, yours faithfully,

August 31st, 1885. A RESIDENT OF WINDSOR.

CHOLERA MALIGNA.

To the Editor of THE LANCET.

SIR.—For safe criticism, accuracy and impartiality are indispensably necessary. It will not, I think, be difficult to show that Mr. Purvis fails in the former, and "M.R.C.S.E., L.R.C.P. Ed.," in the latter qualification, in their communications of Aug. 22nd.

In the first paragraph of his letter Mr. Purvis says that I have "brought forward several theoretical considerations to bear out what I consider to be the line of treatments in Asiatic cholera." Such a statement is, I consider, incomplete, and therefore inaccurate. My "theoretical considerations" are backed, first, by successful practice in one case out of many recorded; and, secondly, by a description of the acknowledged action of the drugs recommended as serviceable, in pathological conditions known to bear a similarity to those present in the disease. It needs no argument to prove that, if the two diseases referred to differ only in point of severity, remedies which are successful in the one must prove of use in the other. But Mr. Purvis should be aware that his simple assertion to the contrary is no proof. Again, it is difficult to see how they can be "quite distinct from each other" when they have "many clinical features in common." I again assert that they differ only in degree. What evidence is there to the contrary?

Passing to the second paragraph of his letter, Mr. Purvis is inaccurate in stating that I consider opium harmful in the early stages of cholera. I have not said so. I have compared opium with chloral, and found the latter safer, because it causes less depression. A sedative is needed; morphia will answer; but to go beyond prescribing half a grain in twelve hours is to incur the risk of cardiac depression from the remedy, whilst chloral and belladonna can be given with safety. I reported a case of English cholera last year in THE LANCET in which a cure was rapidly effected with morphia, ammonia, and carbolic acid in an ordinary effervescing mixture. Mr. Purvis "knows of no remedy which can stay the progress of the disease when the stage of collapse has set in." I venture to hope that my formula may be of some service in that direction. But Mr. Purvis has not spoken, as I hoped someone would do, more particularly about opium. What proof have we that it is ever a cardiac stimulant? If it should be positively demonstrated by experiment that it has only depressant properties—nay, if it should only be recognised as a doubtful stimulant of the heart,—its use would become contra-indicated in such diseases as pneumonia and cardiac debility, in which, as in many others, it is now regularly prescribed. I should like the matter tested by those engaged in experimental research, for it is, to my mind, one of immense importance.

As for "M.R.C.S.E., L.R.C.P. Ed.," the stamp of impartiality is so plainly absent from his communication that it needs no special comment for its indication. What evidence is there, though, that the painless looseness of the bowels, lasting from a few hours to several days, is not ordinary diarrhœa which predisposes to attacks of cholera proper? Such cases are, in my opinion, much more rapidly checked by ammonia and carbolic acid, with either morphia, opium, or chloral in small doses, than by acids and opium. There can be no true cholera, be it English or Asiatic, without vomiting.

The second paragraph of his communication is simply astonishing. That there is no cardiac depression in cholera, not even in the stage of collapse, "M.R.C.S.E., L.R.C.P. Ed." will, I think, find few to believe. The salts of ammonia have been tried by him, and found "next to useless." Carbolic acid has been found by him to have "no appreciable effect." After this ruthless dismemberment of my prescription, "M.R.C.S.E., L.R.C.P. Ed." feels justified in finding that "Asiatic cholera is a disease for which no specific has

as yet been discovered, hence the thousand and one drugs advertised for its cure." But where is the chloral? where the mixture of ammonia, belladonna, chloral, and carbolic acid? and where the evidence that, when a thousand and one remedies have been tried and found wanting, the thousand and second shall not prove equal to the occasion? Neither Mr. Purvis nor "M.R.C.S.E., L.R.C.P.Ed." has said anything about my argument that, as acids have a direct astringent action upon the blood, which in cholera is already so viscid as to be almost devoid of flowing power, they should be avoided in all stages of the disease. I use ammonia with small doses of opium or morphia and carbolic acid (in two-grain doses) in all ordinary cases of acute diarrhœa, and with better results than with sulphuric acid. I am inclined to think, therefore, that the good done is not so much due to the acid as to the opium in the mixture referred to.

Trusting that the opium and morphia question may be more fully taken up by the champions for what they in all terrible earnestness believe to be their stimulant properties,

I am, Sir, yours faithfully,

August, 1885. C. R. ILLINGWORTH, M.D.Ed.

INCISION FOR THE RADICAL CURE OF HYDROCELE.

To the Editor of THE LANCET.

SIR,—I see in THE LANCET for July 4th, 1885, that Mr. Edward Bellamy advises the method of incision, in place of tapping and injection, for the radical cure of hydrocele. I am glad to see that British as well as American surgeons are at last beginning to realise that this plan is both less painful and more certain in results than the iodine or any other injection. I desire in this communication, should you think it worthy of publication, to once more solicit the attention of my *confrères* to this fact, by fully endorsing Mr. Bellamy's remarks, and offering the following statement of my own extended experience in confirmation thereof.

Since 1867 I have been teaching clinical surgery in the wards of the Charity Hospital of this city. I have treated every case of hydrocele coming to my wards during that period by incision, and I cannot recall a failure to effect a radical cure. My *technique* is almost the same as that advised by Mr. Bellamy—namely, a simple incision through the whole front wall of the sac, washing with carbolic acid, placing in a drainage-tube, and stuffing with lint saturated with carbolised oil, (1 part to 12). We differ only in my using the drainage-tube to secure prompt escape of the serous weeping, which is certain to occur early after operations involving serous surfaces.

I am, Sir, yours faithfully,

SAMUEL LOGAN, M.D.,
Emeritus Prof. Anat. and Clin. Surg. Med. Depart.,
New Orleans, Aug. 13th, 1885. Tulane Univ., New Orleans.

"UNEMPLOYED PAY."

To the Editor of THE LANCET.

SIR,—Last year the grievance of "unemployed pay" drawn by officers of the I.M.S. being less than the rates drawn by officers of the A.M.D. was brought to the notice of Parliament, and redress was promised. Accordingly, on Feb. 6th last a Special India Army Circular, as follows, was issued:—"Under instructions from Her Majesty's Government, the Governor-General in Council is pleased to notify that in future an officer of the Indian Medical Service, when holding no specific appointment, will be allowed the rates of pay drawn by officers of the Army Medical Department. When holding an appointment, permanent or acting, he will draw either the consolidated pay fixed for that appointment, or unemployed pay (to be designated in future 'grade pay') with full or half staff salary or charge allowance, under existing rules, provided the total be not less than the grade pay laid down in Article 301, Army Regulations, India, vol. i., part 1." The grade pay in Article 301 is the "unemployed pay" which constituted the grievance brought to the notice of Parliament last year. This order remained in force until the 20th May last, when another Special India Army Circular, as follows, was issued:—"The following correction is made in Clause 16, India Army Circulars, 1885: For the words 'an officer,' in lines 2 and 3, substitute the words 'a surgeon.'" This makes a great difference. Under the former rule a Surgeon-Major, I.M.S., drew the rates of pay drawn by a Surgeon-Major, A.M.D., but under the "correction" rule, even when holding a permanent charge, he draws *less* pay than a Surgeon-Major, A.M.D., if they are both above fifteen years' service. The subjoined table of rates of pay of the two services shows that the grievance increases by length of service, instead of diminishing. Why such an invidious distinction should be made I do not know; but I trust, Sir, you will bring to notice this grievance of Surgeon-Majors, I.M.S., and advocate its removal as successfully as you did that of the surgeons.

Surgeon-Major.	Indian Medical Service.		A.M.D.
	Grade pay.	In charge of a regt.	Grade pay.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Above 15 years' service	677 6 11	800 0 0	825 11 5
,, 20 ,, ,,	852 3 7	1000 0 0	1056 9 7
,, 25 ,, ,,	888 12 0	1000 0 0	1093 2 0

I remain, Sir, yours truly,

India, August 8th, 1885. A SURGEON-MAJOR, I.M.S.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

WASHINGTON HALL AS A CONVALESCENT HOME.

THE munificent gift of Sir Lowthian Bell of his late house and grounds at Washington, to be used as a convalescent home for our city, has come upon us as a great and agreeable surprise, and also, it must be admitted, at a time when it was much needed. I have, in previous letters mentioned the want for our city and district of an inland convalescent home, the magnificent institution at Whiteley being at some periods of the year not adapted for many classes of cases, while at others—the present time for instance—all its vast accommodation is called into requisition. Some doubts having been expressed as to the salubrity of Washington, a large employer of labour writes to say, that among some hundreds of his work-people, over whom he exercises the strictest personal supervision in sanitary matters, what are considered as epidemic diseases are almost invariably confined to single houses, where the original cases have been traced to the towns, and that there is an almost entire absence of chronic disease. In the district of Barmston, surrounding the Washington Chemical Works, the death-rate is 16 per 1000; and Washington is said to be the third driest place in England. In addition to this, the hall and grounds are so well sheltered that invalids and children might venture out in the severest weather.

YORK EYE INSTITUTION.

At the annual meeting of the York Eye Institution, held on the 27th ult., it was stated that the number of new patients for the past year had been 774, being above the average of the last few years. The operations had been eighty-six. The financial state of the institution was also satisfactory. A vote of thanks was passed to Dr. Anderson for his valuable services, and also to the Nursing Institution for aid rendered by a supply of skilled nurses at a very reduced cost.

CURIOUS CHOKING CASE AT THE NORTH RIDING ASYLUM.

An inquest was held upon an inmate of the North Riding Lunatic Asylum, who died very suddenly from choking. The man was fifty years of age, and was insane and paralysed from intemperance. Although his food was minced, he had managed to seize and conceal some cut meat as he was passing to the dining-room. When he sat down to dinner he was immediately seized with choking, and although the house-surgeon was soon on the spot, he found the man dead. At the post-mortem a piece of mutton weighing one ounce was found completely wedged in the glottis.

A SAD CASE.

A few weeks ago a little boy, aged nine years, by name Joe S——, was admitted into the Newcastle Infirmary

shortly after a locomotive had passed over both his arms, and so frightfully injured them that it was necessary to amputate both limbs. The unfortunate lad has recovered, and is about to be discharged. Mr. Frederick Page, the surgeon under whose care he has been, writes to the local papers, stating that in all probability "little Joe has a long life before him, and what chance has he of spending it usefully, deprived of his hands, the means by which he lives?" Mr. Page points out to the public that there are institutions where he can be taught to help himself, provided a sufficient sum of money can be raised to ensure his admission. I am glad to say that Mr. Page's humane appeal is being fittingly responded to by the public, as considerably over £100 has been sent in in the course of a few days.

REMOTE EFFECTS OF A RAILWAY ACCIDENT.

An inquest was held in Newcastle on Saturday night last upon the body of a man aged thirty-five, by trade a draper, who had hung himself from his own bed-post. It was shown that the deceased had received injuries in a railway accident eight years ago, which had impaired his health and mind. He had since complained of pain in his head, and that he had no pleasure in living. A verdict was returned of suicide while in an unsound state of mind.

Newcastle-on-Tyne, Sept. 2nd.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH UNIVERSITY CHAIR OF ENGINEERING.

THE chair of Civil and Mechanical Engineering in the University of Edinburgh, vacant through the death of Professor Fleeming Jenkin, F.R.S., has been conferred by the Crown upon Professor G. F. Armstrong, M.A., F.G.S., C.E. Professor Armstrong has previously filled the chairs of Engineering at the Yorkshire College, Leeds, and in the McGill University at Montreal.

BRITISH ASSOCIATION AT ABERDEEN.

The annual meeting of the British Association will this year take place at Aberdeen, from the 9th to the 17th of September. A programme has just been issued by the local secretaries, which gives interesting particulars of the various arrangements that have been made with a view to ensuring the success of the meeting. Pure science is not to be allowed to usurp the undivided attention of the members; the sectional meetings are strictly limited to a duration of four hours each day, and the remaining hours are abundantly and delightfully provided for in the way of social gatherings and entertainments, on a scale which speaks very highly of the hospitable spirit of the Aberdonians. Three of the evenings will be occupied by lectures in the Music-hall; at that on the 9th, the retiring President, Lord Rayleigh, will resign the chair in favour of Sir Lyon Playfair, the President-elect, who will then deliver the annual address. On the 11th Professor Grylls Adams will lecture on "Electric Light and Atmospheric Absorption"; and on the 14th Mr. John Murray, director of the *Challenger* Expedition Commission, will discourse on the subject of "Great Ocean Basins." The official head-quarters of the Association will be at the Marischal College—the portion of the University buildings reserved for medical teaching—and the various sections will be accommodated in several of the public halls in the immediate neighbourhood.

NEW COTTAGE HOSPITAL AT HAWICK.

On Saturday the Duke of Buccleuch formally opened a new Cottage Hospital and Dispensary in the Border town of Hawick. The hospital, which has a bright and attractive appearance, is built in the cottage style from the plans of Mr. McLauchlan, architect, of Edinburgh. It will accommodate twelve in-patients, and arrangements have also been made for carrying on an extensive out-patient department. The building, which is provided with all the most recent sanitary improvements and conveniences, has cost about £1300, a sum raised entirely by donations and public subscriptions.

EDINBURGH ROYAL INFIRMARY.

A ward that has as yet stood empty in one of the medical pavilions of the Royal Infirmary is now in process of preparation for the reception of patients, and will shortly be opened. The new ward will be placed under the charge of Dr. J. O. Affleck, who has been for some years assistant-physician to the Royal Infirmary, and who was till recently physician in charge of the Edinburgh Fever Hospital. Dr. Affleck will thus be promoted to the post of staff physician to the infirmary, and will take part with the other ordinary physicians in conducting the class of Clinical Medicine on the extra-academical side of that institution. Dr. Affleck is one of the lecturers on the Principles and Practice of Medicine in the Extra-mural Medical School.

Edinburgh, Sept. 1st.

IRELAND.

(From our own Correspondent.)

BELFAST HOSPITAL SATURDAY.

THE second annual street collection in aid of the funds of the Belfast Royal Hospital took place on Saturday last, the 29th ult., when a sum of nearly £400 was obtained for a very deserving charity. More than 100 stations had been selected, which afterwards were reduced to sixty, attended by 150 collectors, including many ladies. It is a matter of encouragement to find that a large proportion of the day's receipts was obtained from the working classes, who by their increased contributions have shown the value they attach to the benefits of the Belfast Royal Hospital. The amount received is less than that of last year, a deficiency to some extent due to the inclemency of the weather.

QUEEN'S COLLEGE, GALWAY.

The President, in his annual report for the past session refers among other matters to the marked diminution which since the session 1881-82 has taken place in the number of students attending the College. Last year the students numbered 100, or a decrease of three as compared with the previous return, of whom forty were in the Faculty of Medicine. The decrease has been mainly felt in the Faculty of Medicine, a department of the College which it was expected would be injuriously affected by the dissolution of the Queen's University and the establishment of the Royal University in its place. The decline, however, the President believes to be factitious, and clearly assignable to external causes. All that can be said is, that the system of education which has proved so effective in the past will be maintained with unabated vigour in the future; and he cherishes the hope that if the College be allowed to prosecute its work without any disturbance from without, it will yet, participating in the general progress of the country, resume its former career of steadily advancing prosperity and public usefulness. We trust to draw attention to other points in this report at no distant date.

John Beresford Thompson of Belfast, who was charged with having forged a matriculation certificate of the Royal University, has been formally committed for trial at the next assizes.

Professor Cuming, M.D., and Mr. Fagan have been re-elected visiting physician and surgeon respectively to the Belfast Royal Hospital.

The Local Government Board for Ireland have refused to sanction the reductions made in the salaries of the medical officers of Ballymena Union, as proposed by the guardians.

PARIS.

(From our Paris Correspondent.)

THE BARAQUE.

MR. ALFRED ANDERSON, an English resident in Paris, and of a rather inventive turn of mind, is a candidate for the prize offered by the Empress of Germany for the best transportable hospital for sick and wounded in time of war, and for the victims of epidemics in time of peace, which you referred to in a note in THE LANCET of last week. Mr. Anderson has submitted to the Committee of the Red Cross Society at Antwerp a model of his "baraque," or hut for the above purpose, of which he has kindly handed to me the following description:—The baraque is made in sections, each being of the same dimensions. Each section has a window, and the opposite section a sliding ventilator, which is situated near the roof and to the right or left

of the patient, who is placed directly in front of the window; by this means he is exposed to good sunlight and at the same time secured against all draughts. The sections are so adjusted as to fit together, and are secured or fastened together by means of sliding bolts or catches. Door sections can be placed in any portion of the building as required. The roof is also in sections of equal measurement, and overlap, giving great solidity and preventing the wet from penetrating. The whole is painted with three coatings of asbestos paint. The roof sections are covered with Anderson's roofing-felt. A portable folding watercloset forms a separate section, and can be placed in any portion of the building. There is a bed to each section, facing a window, and twelve cubic metres are allowed to each bed. Opposite each door (say to every six sections or beds) there is room for a large table; and here a second or specially adapted door section, if necessary, can be placed, which would open on to the portable watercloset. The watercloset section, as well as the entrance sections, can be placed in any portion of the building. A baraque of twelve sections for twelve beds will weigh about a ton and a half; price £100. The whole is made of sapin (fir tree), and painted with three coatings of asbestos paint. Two men can put it up in an hour and a half (maximum), and pull it down in an hour (maximum). The parts can be placed upon any common cart, and are so light, though strong, that one man can carry a section or part. It is so simple that no tools are required in putting it up or taking it down, and any person can do the work. Any length of hospital can be obtained; and when desired, a second length can be placed back to back with the other, and so on until an entire camp or town is built up. It is easy to walk from one building or number of sections to another by means of the door sections; at the same time the sick can be isolated, singly or in any number. It is needless to say that this baraque can be used as quarters for officers and troops, for stores, offices, &c. The baraque may be built of wood and sail-cloth, and painted as before, the roof being, however, the same as above described; weight 26½ cwt., price £112. It is also built with a double roof to hold a bed on either side, either of wood or of wood and sail-cloth. The weight of this per twelve sections is, in wood, a little less than one and a half tons, and costs £85. In wood and sail-cloth, it is a little over one ton, and costs £100. I have had an opportunity of examining both models which are now at the Exhibition at Antwerp, and it struck me that they both fulfilled the conditions required for such constructions—simplicity, economy, and transportability. They are also waterproof and fireproof. The first, in particular, would be better suited for field service; while the second would be adapted for cottage hospitals in time of peace. The first, however, will answer for both purposes, especially during epidemics, where it may be necessary to isolate patients or to remove them from one place to another.

Mr. Anderson, the inventor of these really practical portable baraques was on the staff of the British Red Cross Society in aid of the sick and wounded in the war of 1870-71, when he had ample opportunities of studying the requirements of troops in such circumstances. In recognition of his services he was created Knight of the Legion of Honour by the French Government.

THE CHOLERA.

There appears to be little or no abatement of the cholera in Spain. In Marseilles the epidemic is rather on the increase; thirty-three deaths were reported on Aug. 31st, with sixty-two patients still under treatment. At Toulon there were six deaths and six in the suburbs reported on the same date, and there were thirty-two patients left under treatment. The panic is great among the inhabitants of these towns, though not to the extent that it was last year. In Paris active measures are being taken to ward off the dreaded scourge. Some malicious persons, however, have reported that the disease exists in the town. On particular inquiry, however, I could find no trace of it in or out of the hospitals, and even the Minister of the Interior found it necessary to give an official contradiction to the report. The health of Paris has not been for a long time so good as it is at present.

M. Chevreul, the celebrated academician, entered yesterday upon his one hundredth year, having been born on the 31st of August, 1786. He has been a member of the Institute since August 7th, 1826, in succession to M. Proust.

Paris, Sept. 1st.

THE SERVICES.

SURGEON-GENERAL T.W. FOX, Principal Medical Officer on the Staff of Lieut. General Sir F. Stephenson, Commanding the Army of Occupation in Egypt, has been selected for Staff service in India.

Brigade Surgeon J. Davidge has handed over the medical charge of the Victoria Hospital at Suez to Surgeon-Major A. Gore, of the Army Medical Staff.

WAR OFFICE.—Surgeon-Major William Graves to be Brigade Surgeon, vice Samuel Black Roe, M.B., C.B., promoted. Surgeon-Major John Candy, M.D., half-pay, has been granted retired pay, with the honorary rank of Brigade Surgeon. The undermentioned Surgeons on probation to be Surgeons:—John Furse McMillan; Sydney Glenn Allen; James Sullivan Green, M.B.; Glascott Hardy Symes, M.B.; Cecil Alexander Lane, M.B.; Philip Cecil Harcourt Gordon; Llewellyn Thomas Manly Nash; John Henderson Brannigan; Michael O'Halloran, M.D.; Claude Stephen Sparkes; William Hooper Pinches; Henry Frederick Horne; James Henry Daly; George Jerry Arthur Tuke; Patrick B. Skerrett; Herbert Crowley Dent; Frederick James Greig; Charles Hayden, M.D.; Henry Davis Rowan, M.B.; Howard Carr, M.D.; Harold George Hathaway; Arthur Lewis Hoper Dixon; Charles Greaves Woods, M.D.; Phillip Jebb Rencontre Nunnerly; Benjamin Allen Maturin; Henry Vincent Dillon; Thomas Daly; Michael John Sexton, M.D.; Henry Talbot Baylor; Herbert Eustace Cree; Francis Lindesay Carte; William Henderson Starr; Alexander Arthur Sutton; Alfred Philip Henry Griffiths; William Samuel Boles, M.B.; Herbert Longmore Grant Chevers; Frederick Joseph Wetherall Stoney; John Fitzgerald Burke; Hugh Nugent Kenny, M.B.

ADMIRALTY.—Staff Surgeon Brien Patrick Sarsfield McDermott, B.A., M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet. The following qualified candidates for the Naval Medical Service have been appointed to be Surgeons in Her Majesty's Fleet: William Edward Home, M.B.; Richard Aubrey Fitch; Henry Bullen Beatty; William Spry; Percy Edmund Maitland; George Hamilton Henry Symonds, M.B.; William Joseph Winckler; James Joseph Walsh, M.B.; John Moore, M.D., B.A.; Cyril James Mansfield, M.B.; Robert Hickson; Herbert Parke Shuttleworth; John Lowney; George Dacre Trevor-Roper; Octavius Stephens Fisher; John Samuel Fogerty, M.D.

The following appointments have been made:—Staff Surgeon Thomas D. Gimlette, to the *Orion;* Surgeon William M. Rae, to the *Dart;* Surgeon John Cashin, to the *Mistletoe;* Surgeon George W. Bell, to the *Duncan;* Surgeons James J. Walsh, William J. Winckler, Henry B. Beatty, William Spry, Percy L. Maitland, George H. Symonds, Richard A. Fitch, and William H. Howe, to the *Duke of Wellington*, additional, for Haslar Hospital; Surgeon John Moore, to the *Duke of Wellington*, additional, for disposal; Surgeon Cyprian J. Mansfield, to the *Asia*, additional, for disposal; Surgeons Robert Hickson, Herbert P. Shuttleworth, John Lowney, and Geo. D. Trevor Roper, to the *Royal Adelaide*, additional; Surgeon Octavius S. Fisher, to the *Impregnable*, additional; Surgeon John S. Fogerty, to the *Cambridge*, additional; and Surgeons Alfred M. Page and Charles B. d'E. Chamberlain, to the *Duke of Wellington*, additional, for disposal.

ARTILLERY VOLUNTEERS.—1st Cumberland: Surgeon and Honorary Surgeon-Major Joseph Pearson, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—3rd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Henry Smith, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Surgeon and Honorary Surgeon-Major Bertie Pardoe Mathews resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement.

CALF LYMPH FOR PUBLIC VACCINATORS.—At the meeting of the Derby Board of Guardians on the 1st inst., it was resolved on the motion of Mr. George Rice that it was desirable that the public vaccinators in the north and south districts of the Union should be supplied with calf lymph every week. Should the Local Government Board not grant a supply free of cost, the adoption of the system will involve an outlay of about £26 a year.

Obituary.

GEORGE GILL, L.R.C.P., M.R.C.S., L.S.A.

MR. GEORGE GILL, whose death occurred at his residence at Liverpool on the 27th ult., received his professional education at University College, and obtained the diploma of Membership of the Royal College of Surgeons and the licence of the Society of Apothecaries in 1839. In 1860 he became a Licentiate of the Royal College of Physicians of Edinburgh. Mr. Gill was a member of the Liverpool Townl Council, for some years acting as vice-chairman of the Health Committee; and five years ago he was appointed a city magistrate. In both of these positions he ably and conscientiously discharged the duties which fell to his lot; and his death, which was not anticipated, will be long mourned by those with whom he was brought into contact.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 27th ult.:—

Bostock, Robert Ashton, Onslow-gardens.
Emtage, Edmund Walter, Endsleigh-gardens.
Julian, Oliver Richard Archer, St. Bartholomew's Hospital.
Mathias, Hugh Brodrick, Minehead, Somersetshire.
Milner, Edmund Taylor, Crescent, Salford, Manchester.
Thomas, Archibald, Towey House, Wellingborough.

THE workshop collection on behalf of the Hospital Saturday Fund will be held to-day (Saturday).

A TENDER of £299 has been accepted for the sanitary improvements at the Windsor Royal Infirmary.

VACCINATION GRANT. — Mr. Charlton, Brabourne, has received the Government grant for successful vaccination (second time).

A MONTHLY journal of medicine and hygiene has just been commenced at Varna, as the organ of the Local Medical Society.

THE open space in front of St. Thomas's Hospital has been thrown open, and will be handed over by the governors to the Lambeth parish.

STEPS are being taken to present a testimonial to Mr. G. B. Childs upon his retirement from the position of surgeon to the City of London Police Force.

MR. S. WATSON, late medical officer of the Cottingham district of the Sculcoates Union, has been granted a superannuation allowance of £45 per annum.

As a result of the recent Church Parade and demonstration held on behalf of the Metropolitan Free Hospital, Kingsland-road, £156 has been handed to the secretary in aid of the funds of that institution.

THE returns up to the present of the Weston-super-Mare Hospital Sunday collection, which was held on the 30th ult., show an increase compared with the sum realised in 1884.

THE Metropolitan Police have received orders not to take into custody a person who attempts to commit suicide, but to apply for a warrant for the apprehension of the individual on the charge of misdemeanor.

FROM the report of Colonel Sir Francis Bolton, it appears that the water derived from the Thames during July by the various metropolitan water companies contained less organic matter than in the previous month.

THE HEALTH OF PLYMOUTH.—In view of the possible importation of cholera infection into England from Spain or other countries, a handbill drawn up by the medical officer of health has been sent to every family in Plymouth, in which some plain and useful hints are given on the following points: condition of premises, ventilation, cleanliness, water-supply, food, and house refuse.

THE ratepayers of Cambridge have petitioned the Local Government Board for a division of its populous parishes. The Board has referred the matter to the guardians for their report.

A CONFERENCE of persons interested in the reform of the Lunacy Laws, convened by the Lunacy Law Reform League, was held on the 28th ult., when a resolution was passed urging electors to make such reform a test question at the next election.

THE Birmingham Board of Guardians, at a meeting on the 2nd inst., by a majority of 28 to 16, declined to rescind the resolution passed at the last meeting, approving of the scheme to spend £60,000 in providing new infirmary buildings at the workhouse.

AT a meeting of the Erith Local Board on the 1st inst., it was decided to ascertain what powers the board possessed to indict the Metropolitan Board of Works for the nuisance they caused by allowing the Thames to remain in its present filthy condition.

THE "New York Medical Record" states that M. Crouzel has isolated a body having all the properties of an alkaloid from the mandrake (*Mandragora officinalis*). This body forms a sulphate which is crystalline. A solution of this salt was found to have marked mydriatic effects on the eye of a rabbit.

AT the meeting of the Wolverhampton Board of Guardians on the 21st ult., it was stated that typhoid fever was very prevalent in a certain district of the town. It was decided to isolate the cases in the Bilston Infectious Hospitals.

THE sections of the International Pharmaceutical Congress at Brussels will discuss—(1) Professional Questions; (2) Questions of Theoretical and Practical Pharmaceutical Science; (3) Questions of Chemistry in relation to Hygiene; and (4) Questions concerning General and Applied Biological and Juridical Chemistry.

UNIVERSITY OF CAMBRIDGE.—The next examination for the certificate in Sanitary Science of the above university, open to all whose names are on the Medical Register of the United Kingdom, will begin on Tuesday, October 6th. The names of candidates must be sent, on or before September 28th, to Professor Liveing, Cambridge.

IT is stated that Mr. Francis Galton has already obtained valuable results from the family records sent to him last year in response to his offer of prizes, and that he intends to make use of them in his presidential address to the Anthropological Section of the British Association at Aberdeen.

THE SEWAGE OF LEICESTER.—On the 28th ult., Major Tulloch, one of the inspectors of the Local Government Board, expressed his approval of a new scheme for the disposal and utilisation of the sewage of Leicester, at an estimated capital cost of about £100,000, and an annual outlay of £10,000.

AT an inquest which was held last week on the body of a little boy aged fifteen months, one of the medical officers of the Seamen's Hospital, Greenwich, stated that he had performed tracheotomy as soon as the child was admitted, but nothing could be found of a shrimp's head which it was believed the child had swallowed, and which had produced obstructed breathing. After the operation the dyspnœa continued and the child died the same day. At the autopsy it was found that the shrimp's head had lodged in the trachea just above the bifurcation.

THE HOSPITAL SCANDAL.—At a meeting of the St. Pancras Vestry on the 2nd inst., it was unanimously resolved that the evidence taken by the Local Government Board inspectors, with reference to the expenditure, &c., at the Eastern (Homerton) Hospital of the Metropolitan Asylums Board, discloses a lack of efficient control over the affairs of the hospital, a loose and careless mode of conducting the business of the establishment, and an extravagant outlay of public money; and necessitates a searching inquiry, not only into the management and expenditure of the hospital in question, but also of the other hospitals of the Metropolitan Asylums Board, and of the

affairs of the Board generally; and that it is expedient that such inquiry be conducted by a Parliamentary Commitee or Royal Commission. The various vestries, district boards, and boards of guardians of the metropolis are to be invited to co-operate in obtaining such an inquiry as that demanded.

THE University of Pennsylvania and the Jefferson Medical College have each discontinued their post-graduate course.

THE SPREAD OF HYDATID DISEASE.—The Melbourne Central Board of Health have issued a useful circular for the information of the public in relation to this matter, pointing out the dangers to be avoided and the best methods of preventing this terrible evil. It shows that next to Iceland, where one-sixth of the deaths occur from hydatid disease, Victoria is more subject to it than any other country. It recommends the urgent necessity of proper care being taken by the authorities for the efficient carrying out of the registration of dogs—a matter which, though perhaps not carried out as it might be in Victoria, is, by the police authorities in New South Wales, culpably and almost absolutely neglected.

MEDICAL EDUCATION IN NEW SOUTH WALES.—In the Medical School at Sydney University there are now twenty-three students for graduation in medicine and surgery—a number which may be considered very fair after only two years' existence of the school; seeing also that every medical student must have passed one year in arts before entering the school. Great progress has been made in the way of organising the different teaching agencies connected with this school, and considerable additions have recently been made to its special library, and to the museums and scientific apparatus in the different departments. In the Prince Alfred Hospital, which is by statute and by its position on land surrendered by the Senate for the purpose, specially connected with the University, arrangements have been made for the teaching of medical students in accordance with the University curriculum and time-table.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BEDDOES, T. P., M.R.C.S., has been reappointed Clinical Assistant to the Skin Department of St. Thomas's Hospital.

BOURNE, ALFRED, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Osmotherley District of the Northallerton Union.

BULLOCK, JOHN G. W., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer for the Rugby District and the Workhouse of the Rugby Union.

CLARKE, J. M., B.A., M.B.Cantab., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

CLEGG, JOHN HAGUE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Stockton Urban Sanitary District, vice Trotter, deceased.

COX, WILLIAM L., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Bishop's Castle No. 1 and Lydbury North Districts of the Clun Union.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

FOULERTON, A. G. R., M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the Royal Isle of Wight Infirmary, Ryde, vice J. Walter Hopkins, resigned.

GREVILLE, FRANK A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Churchstaunton District of the Taunton Union.

JACK, CHARLES, M.D., C.M. Univ. Glas., has been reappointed Medical Officer of Health for the Horsforth Urban Sanitary District.

KERSHAW, M.A., M.B.Oxon., M.R.C.S., L.R.C.P., has been appointed Resident Accoucheur to St. Thomas's Hospital.

KIDD, H. C., M.R.C.S., L.R.C.P., has been reappointed Clinical Assistant to the Ear Department of St. Thomas's Hospital.

LAWSON, R., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to St. Thomas's Hospital.

LYON, T. GLOVER, M.A., M.D.Cantab., M.R.C.S., L.R.C.P., has been reappointed Non-resident House-Physician to St. Thomas's Hospital.

MATHEY, ARTHUR, L.R.C.P., M.R.C.S., has been appointed House-Surgeon to the Croydon General Hospital, vice Odling, resigned.

MORISON, J. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Pembroke Union.

MURRAY, JAMES, M.B., C.M.Aber. (late Assistant Medical Officer at Mountjoy Prison, Dublin), has been appointed Assistant-Surgeon to Her Majesty's Prison, Wakefield, Yorks.

PEDLEY, NEWLAND, F.R.C.S., L.D.S., has been appointed Dental Surgeon to Guy's Hospital.

PLOWMAN, S., L.R.C.P., M.R.C.S., L.S.A.Lond., has been reappointed Clinical Assistant to the Throat Department of St. Thomas's Hospital.

RELTON, B., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to St. Thomas's Hospital.

RITCHIE, E. D., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Physician to St. Thomas's Hospital.

ROBERTS, LLOYD, M.D., F.R.S.E., F.R.C.P.Lond., has been appointed Obstetric Physician to the Manchester Royal Infirmary, vice Thorburn, deceased.

STAFF, GEORGE THOMAS ALBERT, L.K.Q.C.P.I. & L.M., M.R.C.S., has been reappointed Medical Officer of Health for the St. Ives, Cornwall, Urban Sanitary District.

VOIGT, J. C., M.D.Ed., M.B., C.M.Ed. (late Senior Resident Medical Officer at the Infirmary, Bury), has been appointed Resident Medical Officer and Visiting Surgeon to the Infirmary and Dispensary, Southport.

WILLIAMS, R. M., L.R.C.P., M.R.C.S., L.S.A.Lond., has been reappointed Resident House-Physician to St. Thomas's Hospital.

Births, Marriages, and Deaths.

BIRTHS.

CROSSMAN.—On the 28th ult., at Trecarrol, Redruth, the residence of her father, the wife of John Crossman, M.R.C.S., L.S.A.Lond., of Westbrooke House, Wandsworth-road, S.W., of a son.

GALLOWAY.—On the 22nd ult., at Epping, the wife of Arthur Wilton Galloway, M.R.C.S., L.R.C.P.Lond., of a son.

HALL.—On the 28th ult., at Queen Anne-street, W., the wife of F. de Havilland Hall, M.D., F.R.C.P., of a son.

INMAN.—On the 30th ult., at 243, Hackney-road, the wife of R. E. Inman, M.R.C.S.Eng. (prematurely), of twins, both daughters.

MARRINER.—On the 1st inst., the wife of W. H. Lister Marriner, M.B.Lond., of a daughter.

MASTERS.—On the 25th ult., at Westall House, Brook-green, W., the wife of J. Alfred Masters, L.R.C.P.Lond., M.R.C.S., of a son.

RING.—On the 29th ult., at Keswick, the wife of C. Gore Ring, L.R.C.P.Ed., M.R.C.S., of a son.

SIMMONS.—On the 27th ult., at Fairbridge House, Upper Holloway, the wife of E. Walpole Simmons, M.B., M.R.C.S., L.S.A.Lond., of a daughter.

SMITH.—On the 30th ult., at Kensington-gardens-square, the wife of E. Stanley Smith, L.R.C.P.E., &c., of a daughter.

SPOONER.—On the 31st ult., at Maitland Lodge, Clapton, the wife of Fred. H. Spooner, M.D., of a son.

TEEVAN.—On the 24th ult., at St. Kevin's-park, Upper Rathmines, county Dublin, the wife of Deputy Surgeon-General T. Teevan, J.P., of a daughter.

TURLE.—On the 1st inst., at Cliffe House, Enderby, Leicester, the wife of Arthur Turle, M.R.C.S., L.S.A.Lond., of a daughter.

MARRIAGES.

CASTOR—JOHNSTON.—On the 24th ult., at St. Saviour's, Haverstock-hill, Christian Francis Castor, M.B., to May, second daughter of William Johnston, of London.

COX—HAUGH.—On the 25th ult., at Didsbury Parish Church, Richard Percy Cox, M.D., of Bowdon, Cheshire, eldest son of the late W. H. Cox, M.R.C.S., of Manchester, to Louisa Leonides Johanna, eldest daughter of Charles Haugh, Esq., of Didsbury.

EMSON—BROOKE.—On the 1st inst., at St. Peter's Church, Fareham, Alfred Emson, M.R.C.S., to Mary Jane Brooke, of Southfield, Dorchester.

LAWRIE—SMITH.—On the 27th ult., at St. James's, Piccadilly, by the Rev. Canon Stephenson, Vicar of St. John's, Weymouth, assisted by the Rev. A. F. A. Lambert, James Macpherson Lawrie, M.D., of Weymouth, to Annie, youngest daughter of the Rev. Samuel Johnson Smith, of Smithborough and Orchard Vale, co. Monaghan, and niece of the late Dr. Smith, of Greenhill, Weymouth.

WELSFORD—WILLOUGHBY.—On the 25th ult., at St. Cuthbert's Church, Bedford, George Frederic Welsford, M.B.Camb., of Woodstock, to Emma Henrietta, third daughter of Lieut.-Col. Willoughby, late Bombay Army, of St. Cuthbert's, Bedford.

DEATHS.

HEDLEY.—On the 1st inst., at Welford, Rugby, Charles Hedley, M.R.C.S.Eng., L.S.A.Lond.

JONES.—On the 26th ult., at Lichfield House, Weston-super-Mare William Jones, F.R.C.S.E., aged 73.

KARKEEK.—On the 30th ult., at Iser Torquay, Clara, wife of Paul Q. Karkeek, M.R.C.S. &c.

TEEVAN.—On the 24th ult., at St. Kevin's-park, Upper Rathmines county Dublin, the wife of Deputy Surgeon-General T. Teevan, J.P., aged 31.

TREVOR.—On the 15th ult., at Malta, Surgeon Robert Trevor, A.M.S. son of Mr. R. S. R. Trevor, Derwen, Welshpool.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Sept. 3rd, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 28	29·85	S.E.	60	56	96	65	55	·05	Cloudy
,, 29	29·85	E.	57	51	91	67	51	...	Cloudy
,, 30	30·14	N.E.	58	50	95	62	50	...	Cloudy
,, 31	30·10	E.	55	52	78	61	52	...	Overcast
Sept. 1	30·11	E.	56	51	100	62	50	...	Hazy
,, 2	29·96	S.E.	58	54	91	66	51	...	Cloudy
,, 3	29·69	W.	64	61	...	...	57	·35	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE STUDENTS' NUMBER OF "THE LANCET" will be published on Saturday next, Sept. 12th. Those gentlemen holding official situations connected with medical institutions in the United Kingdom who have not yet forwarded the necessary information to our Office for publication in that number are earnestly requested to send it *without the delay of a single post.*

THE KYRLE SOCIETY.

THE members of the Kyrle Society have issued an appeal on behalf of the inmates of hospitals, workhouses, and infirmaries, for the books which are purchased to while away a few hours' journey by those who at this time take their holiday, and which when they have served this purpose are frequently thrown away. The applications for literature made to the Society far exceed the supply. A tourist's pleasure in his trip will not be diminished, but rather increased, if he possess the consciousness that he has done what lay in his power to relieve the monotony of existence experienced by the sick, the poor, the old, and the infirm. The offices of the Society, to which books and magazines may be sent, are at 14, Nottingham-place, W.

Physician.—As to whether he is *morally* justified in so doing, there can be no doubt; but, unfortunately, in the present state of the law there is no *legal* impediment.

M.D.—We prefer not to interfere in the matter. The article alluded to was not worth serious notice.

INTENSIFIED HEARING.

To the Editor of THE LANCET.

SIR,—Will you allow me through the medium of your journal to ask any of my professional *confrères* for their advice in a case which is now under my care? The patient, a gentleman of forty years of age, has for about three weeks been troubled with the sound of his own voice being intensified, as though "reflected from a sounding-board on the top of his head;" in speaking this appears unpleasantly loud, and in singing unbearably so, whilst the noise of a street or railway travelling is, to use his own words, "enough to drive him mad." He is an active, abstemious, and healthy subject. Thinking the fault might lie either in the outer ear or the Eustachian tubes, I have thoroughly cleansed by syringing the first, and inflated the second, without effect. The tympanus are natural. The medicinal treatment has been nerve tonics, with (there being a slight family tendency to gout also) Turkish baths as an adjunct. Still no improvement.

I am, Sir, yours obediently,

September 1st, 1885. J. H.

RECENT WORK IN MICROSCOPY.

THE advances made in recent microscopical research are well shown in the numerous papers that have been published in the *Journal of the Royal Microscopical Society*, which is edited by Mr. Frank Crisp; and one of our contemporaries has drawn attention to the fact that under the eye of a skilled observer a good objective of one-tenth of an inch focal length will now accomplish as much as or more than an objective of one-twenty-fifth of an inch manufactured ten or fifteen years ago, while those now made of the high power signified by one-fiftieth of an inch focal length, and capable of magnifying from two to ten thousand diameters, according to the eyepiece used, greatly surpass in all important qualities lenses of the same forms sold by the best makers less than five years ago. The discovery of the utility of immersion lenses—that is to say, of lenses adapted to enable the observer to see objects distinctly when the objective is immersed in the fluid in which the specimen is preserved, whether oil or water—has also proved of great service. Further improvements have been made by the leading manufacturers, and in no way greater than by effecting great reduction in the price of their instruments. These are now sold for so reasonable a sum that a microscope should be in the hands of every teacher, and almost in the library of every family. The "Star" microscope, manufactured by Messrs. Beck, for example, is of excellent finish, possesses two powers (an inch and a quarter-inch), has a fine adjustment, and a tube that is capable of being rotated at any angle with a diaphragm, and is in all respects a trustworthy instrument. Great improvements continue to be made in the lantern microscopes used for magnifying objects for public lectures and demonstrations. A lantern microscope has been constructed by Mr. Lewis Wright which throws large-sized and very clear views of minute objects on a screen free from distortion or colour—a desideratum for lecturers in many branches of scientific teaching, especially in botany and animal histology. Much ingenuity has also been expended in the construction of microtomes. A few years ago there were comparatively few men who could cut a section of a hardened specimen fine enough to display any points of structure under the microscope, and recent tissues were scarcely ever attacked. Messrs. Caldwell and Threlfall of Caius College, Cambridge, devised a complex instrument, which was constructed by the Cambridge Scientific Instrument Society, and was capable when in good working order of delivering three sections on a continuous riband at the rate of from one to two hundred per minute. An improvement has been made upon this instrument, and the "rocking" microtome, as it is called, leaves scarcely anything to be desired. Its cost is less than one-sixth of that of the original instrument; the sections can be made to a fineness of one-forty-thousandth of an inch, and they can be deposited in succession on the slides for subsequent examination. It is easy to work, portable, and not liable to get out of order. Two excellent manuals can now be purchased—one, entitled "A Course of Practical Instruction in Botany," by Messrs. F. O. Bowen and Sidney Vines, the other by Mr. E. A. Schäfer, "The Essentials of Histology"—which will supply the young microscopist with all the information he needs to pursue either vegetable or animal histology, and which we strongly recommend to those who are interested in these subjects.

Mr. R. Fraser Woodrock.—Chambers' Manual of Diet in Health and Disease (Smith and Elder).

Mr. J. B. Holloway.—See THE LANCET, July 25th, p. 188.

Surgeon-General W. J. Moore.—The paper shall appear in an early number.

PRESERVATION OF EXTRACTS.

To the Editor of THE LANCET.

SIR,—Most practitioners must have experienced the difficulty of keeping, for any but the shortest period, the extracts of the Pharmacopœia at a proper consistence for pill-making or other purposes. Very soon after arrival from the druggist, especially in warm climates, however carefully they may be put away in closed pots, it will be found that they have become tough and hard, and it is only by the diligent use of the pestle and mortar, coupled with a considerable degree of patience, that it is possible to utilise them. Some, again, show a tendency to become mouldy, or in warm weather to ferment. These great drawbacks may be perfectly obviated by combining with the extracts, *whilst still soft*, some glycerine. The proportions I use are: extract, four parts; glycerine, one part; each by weight. Mix intimately by trituration in a mortar, or with a spatula on a slab. Doubtless, a smaller quantity of glycerine would suffice, but the above is easy for calculating. About fifteen months ago I tried the above plan with three extracts (belladonna, hyoscyamus, and physostigma), and the residue is as perfect to-day in consistency, &c., and also in therapeutical effect, as when freshly prepared, although left purposely most of the time in open pots. With the other soft extracts of the Pharmacopœia it would, I dare say, act equally well.

I claim no originality for this simple method, but think it needs only to be widely known to be well appreciated.

I am, Sir, yours truly,

CHARLES J. DAVEY, M.B.

Beaufort West, Cape of Good Hope, Aug. 3rd, 1885.

POST-MORTEM EXAMINATIONS IN CASES OF INFANTILE DIARRHŒA.

Mr. David Paterson has slightly misread our leader. It was not Dr. W. B. Hope who said that he had made 500 post-mortem examinations, but Dr. Stocker. It would be very interesting if Dr. Stocker would give details of his observations. We should be glad to be the medium of publishing them.

Mr. J. Buchanan.—There is such a preparation, and no difficulty would be experienced in obtaining it. It is frequently prescribed in small doses in the treatment of colic.

THE ELECTION OF HOUSE SURGEONS IN PROVINCIAL HOSPITALS.

To the Editor of THE LANCET.

SIR,—I venture to write to you on the above subject, which to me seems an important one.

I am a M.R.C.S. Eng. and L.R.C.P. Lond. Seeing an advertisement in THE LANCET a short time ago for a house-surgeon at a certain infirmary in Wiltshire, I answered it, and sent my testimonials. The advertisement said: "Every candidate must appear on the day of election;" so I accordingly went to the place, the journey taking six hours, and put up at an hotel. Next morning I walked down to the infirmary an hour before the time of election to look round, and was then casually informed that I should have no chance, as the appointment rested between two local men, who had been canvassing heavily among the governors. Though seeing that I had no chance, I nevertheless presented myself at the appointed time, expecting, of course, that something like a form of election would take place. There were five other outside candidates like myself, and we were all shown into a room. There we remained over two hours, when the successful local man entered and informed us of his election, to our utter astonishment, as not one of us had been seen by the committee of governors; and, moreover, I was informed that the committee were then engaged in looking over our testimonials, the ballot having taken place. I do not for one moment complain that canvassing is not fair; but my ground of complaint is this: Why should the committee, knowing that the election lay between two men, put the other six candidates to the trouble and expense of appearing at the election, and then not see one of them—in other words, totally ignore their presence? I was informed in reply to this that by a minute in the infirmary rules the governors were bound to duly advertise the appointment before the election. This difficulty might easily be got over, in my opinion, by adding, "Selected candidates must appear on the day of election." I applied for my railway expenses, which were given me; but still I am far from repaid my hotel and extra travelling expenses, to say nothing of the trouble of having to get away for two days. I should like to know if something could not be done in such a case, as it seems monstrous to me that medical men should be played with in the above unjust manner and have no power to resent the insult. Yours faithfully,

Aug. 31st, 1885. FAIRPLAY.

*** There is much reason in our correspondent's complaint. We trust that the publication of his letter will increase consideration for candidates who have no chance of success.—ED. L.

"WESTERN AUSTRALIA VOLUNTEER CORPS."

To the Editor of THE LANCET.

SIR,—In THE LANCET of Aug. 22nd the statement occurs, in the annotation on a Western Australia Volunteer Corps, that "in England there is no such appointment as surgeon-major to a volunteer corps, the highest grade being surgeon." Permit me to mention the exceptional case of the Queen's City of Edinburgh Rifle Volunteer Brigade, consisting of two battalions and numbering of recent years 2000 strong, the appointment of surgeon-major to which corps is filled by the able and popular Professor of Medical Jurisprudence in the University of Edinburgh, Dr. Douglas Maclagan. Naturally, I take the sentence under criticism as applying to Volunteer Corps in Britain as distinguished from those in the Colonies. I am, Sir, yours faithfully,

Aug. 26th, 1885. M.B., C.M. EDIN.

Australian.—Registration in Britain, or the possession of qualifications entitling to registration on the part of any naturalised or natural-born Briton, constitutes a claim to request to be admitted by the Medical Board, and to receive a diploma.

Mr. Richard Cresswell is thanked. The enclosure is unworthy of notice.

MORTALITY AFTER CHILDBIRTH.

To the Editor of THE LANCET.

SIR,—I beg to enclose you my statistics for seven years' practice in midwifery, which at the present time may add to the interest of the above subject.

I have personally conducted 740 cases, which, including six cases of twins and sixty-four cases not noted, consisted of 327 boys and 355 girls, without a single maternal death. In the 740 cases there were: Face, anterior, 8; breech, 12; adherent placenta, 4; footling, 6; twins, 6; hand and arm, 4; prolapse of funis, 1; partial placenta prævia, 2; hydrocephalus, 1; epileptic convulsions during labour, 2; epileptic convulsions after labour, 1; melancholia with suicidal tendency, 1; phlegmasia dolens, 2; perineal abscess, 1; instruments, 16; turning, 8.

I remain, Sir, yours faithfully,

New Charlton, Sept. 1st, 1885. EDWARD LYNN, M.R.C.S. Eng., &c.

MEDICAL AID FOR SPAIN.

To the Editor of THE LANCET.

SIR,—My attention was called to the first "leader" in the *Daily Telegraph* of Aug. 22nd, which was no doubt written by a most excellent, well-meaning, and philanthropic individual, while at the same time one who knows nothing of the character of the people for whom he is pleading. To stimulate the hearts of our countrymen and countrywomen is a very easy matter; they are ever ready to respond to cases of distress and suffering in foreign lands. But in reference to the strong appeal made by the writer of the leading article in question, knowing the character of the people as well as, if not better than, I do that of my own countrymen, I most strongly object to it, and especially to the proposition to send out a staff of our medical men to visit and assist in the choleraic warfare. They would be viewed with the greatest jealousy by the Spanish practitioners, and thwarted in every way in their philanthropic, perilous, and self-denying duty, while at the same time the said practitioners are quite ignorant how to use our remedies for such cases. As to the disinfectants and money proposed to be sent, they would gladly receive all that was contributed, and make a very bad use of both, unless administered through proper channels. The writer of the article probably was not aware that Spain is a very rich and productive country; but the inhabitants are thriftless and wasteful. My proposal would be to send out a staff of Hibernian scavengers and whitewashers to cleanse their streets and houses, and another staff to teach the natives the great benefit to be derived from the use of soap and water on their persons. These simple remedies, locally and nationally used, would in a very short time drive away the filth-produced cholera.—Yours faithfully,

Spain, August, 1885. AN OLD LANCETEER.

G. T. N. (Leeds).—The "hygienic desk" is now on view at the Exposition des Arts Décoratifs at Geneva. It facilitates convenient adjustment of the body, and so lessens the fatigue inseparable from prolonged work. Its construction is adapted for the erect or the sitting posture, so that without leaving his place, and with the greatest ease, the worker can secure the elevation, the distance, and the incline required by the subject he is engaged upon. The patentee is M. Mauchain, who has also constructed models with benches for general use, and others for school purposes solely. The different forms of it may be fitted with shelves, and so attain elegance of design. The hygienic desk is called the "Excelsior," and M. Delapraz is its exclusive *concessionnaire*.

Portland.—We regret we cannot assist our correspondent.

ST. MARYLEBONE WORKHOUSE AND INFIRMARY.

To the Editor of THE LANCET.

SIR,—Some members of the French Municipality who recently visited the metropolis having expressed in the Paris journals an unfavourable opinion of some Poor-law institutions they visited, M. Georges Villain, Editor of the *Temps*, for the purpose of obtaining fuller information on the subject, has this week paid a long visit to the St. Marylebone Workhouse and Infirmary. In the absence of Mr. Lunn, the medical superintendent, it occurred to me that you might think a copy of a translation of the entry made by M. Villain on his visit to the Infirmary sufficiently interesting for insertion in the columns of THE LANCET.

I am, Sir, yours faithfully,

GEO. ED. DOUGLAS,

Aug. 29th, 1885. Master, St. Marylebone Workhouse.

"I am very pleased at having visited the remarkable infirmary of Marylebone, and at having been able to admire the management, the arrangements, and the extreme cleanliness. The small number of deaths is the best proof of the excellence of the care which is given to the sick people. The only fault that I can find with it is that the poor people are too well cared for; but there is no system more calculated to preserve human life or save suffering than this. I only wish, for my part, that the hospitals in France could rival the infirmary of the parish of Marylebone. (Signed) "GEORGES VILLAIN, Editor of the *Temps*.

"Paris, Aug. 29th, 1885."

"I have had much pleasure in accompanying M. Villain, and I endorse all that he says. (Signed) "E. COCQUEREL."

Mr. F. N. Williams.—Speaking generally, it may be said that a nail takes about three months to be completely reproduced. The amount of damage to the matrix of the nail must exercise considerable influence.

Indian Surgeon.—St. Andrews and Durham.

"RAPID PASSAGE OF A COIN THROUGH THE ALIMENTARY CANAL."

To the Editor of THE LANCET.

SIR,—A still more rapid passage of a coin through the alimentary canal than that mentioned in your issue of the 8th inst. has just come under my notice. A child aged six was brought to me on Aug. 27th, at 7 P.M. The mother said the boy had swallowed a farthing. Failing to extract it either with a coin-catcher or a probang, I told the mother to feed the child on solids, and to bring me the farthing when passed. Next day the child was brought at 11 A.M., and it was stated that the coin had been evacuated at 10.45 A.M., thus being only fifteen hours and three-quarters *en route*, or nine hours and a quarter quicker than in the case reported by Mr. Lawday.—I am, Sir, yours truly,

J. HENDERSON SELLICK,

House Surgeon, North-West London Hospital.

Kentish Town-road, N.W., Aug. 29th, 1885.

TOBACCO-SMOKING AN EXCITING CAUSE OF HICCOUGH AND ANGINA PECTORIS.

To the Editor of THE LANCET.

SIR,—Having within the last three months occasionally broken the rule to which I had faithfully adhered for a long time, I have experienced some very unpleasant symptoms, which I certainly believe to be due to tobacco. On several occasions, and that during the act of smoking or shortly after, I have been seized with an uncontrollable and persistent hiccough, a thing to which I never remember having been subject. On the evening of August 29th I had one of the worst of these attacks of hiccough; and that night, shortly after going to sleep, I was awoke by what I took to be my own loud cry or shriek (not being dreaming at the time), and immediately experienced a sense of suffocation, which soon passed off. The following night I smoked a strong cigar shortly before going to bed, and was again awoke from my sleep by a noise in the throat, accompanied by pain in the cardiac region, most violent and disturbed action of the heart, and a feeling of suffocation, together with a fear of immediate dissolution. This state only lasted a minute or two. Unfortunately it was reproduced when sleep was resumed, and again a third time, with still greater violence, to pass off again in a few minutes. The cardiac region, and in fact the whole of the chest, remained very painful for the next twelve hours, and it was only on obtaining the reassuring opinion of a medical friend of much experience, who assured me that the cause was not organic mischief, that my anxiety was relieved, so much had those alarming symptoms told on me.

I find that among the literature of angina pectoris abundant proofs of the ill effects of tobacco are brought forward. Thus, M. Beau, in the *Gazette des Hôpitaux* for 1862, brings forward very good evidence; and M. Gelinau, in the same paper, gives a sketch of the interesting series of cases observed on board the *Embuscade*. This so-called epidemic of angina pectoris was attributed more to the excessive smoking of the persons affected than to other injurious causes that existed along with it.

I am, Sir, your obedient servant,

Sept. 1st, 1885. G. V. P.

THE BRADLEY FUND.

To the Editor of THE LANCET.

SIR,—Will you kindly acknowledge the enclosed additional list of subscriptions. I remain, Sir, yours faithfully,

Eastwood House, Chesterfield, Sept. 2nd, 1885. RICHARD JEFFREYS.

Sir George Burrows, Bart.	£5	5	0	Dr. A. C. F. Rabagliati	£1	1	0
Mr. Arthur E. Durham	5	5	0	Mr. J. Corrie	1	1	0
Dr. J. Russell Reynolds	5	5	0	Mr. Jno. Waterson	1	1	0
Dr. Richard Neale	5	5	0	Dr. Wm. Cayley	1	1	0
Dr. G. H. Kidd	5	5	0	Mr. Walter H. Brown	1	1	0
Mr. John Langton	3	3	0	Mr. Geo. Weller	1	1	0
Mr. Geo. Lawson	2	2	0	Mr. Pridgin Teale	1	1	0
Dr. J. Matthews Duncan	2	2	0	Dr. Eddison	1	1	0
Dr. Sydney Ringer	2	2	0	Dr. W. Stirling Anderson	1	1	0
Dr. Arthur V. Macan	2	2	0	Mr. G. Browning	1	0	0
Mr. Reginald Harrison	2	2	0	Mr. W. T. Alkey	1	0	0
Mr. Theodore Davis	2	2	0	M. M. M.	1	0	0
Dr. Braxton Hicks	2	2	0	Dr. W. W. Alichin	1	0	0
Dr. John W. Ogle	2	2	0	Mr. R. H. Meade	1	0	0
Mr. N. Davies-Colley	2	2	0	Dr. James C. Herbertson	1	0	0
Dr. Seymour Sharkey	1	1	0	Dr. A. R. Macdougal	0	10	6
Dr. C. Y. Biss	1	1	0	Mr. Jno. E. Kenyon	0	10	6
Dr. J. C. J. Fenwick	1	1	0	Dr. Knox	0	10	6
Mr. C. A. Ballance	1	1	0	Dr. A. Swann	0	10	6
Dr. Robt. Liveing	1	1	0	Dr. Geo. Knapton	0	10	6
Mr. A. E. Boulton	1	1	0	Mr. Chauncy Puzey	0	10	6
Dr. Fincham	1	1	0	Mr. B. J. Lee	0	10	0
Professor Gairdner	1	1	0	Dr. A. H. Guest	0	10	0
Mr. Frank T. Paul	1	1	0				

Mr. H. Warneford Thomson.—The original letter has been mislaid; but if our correspondent will repeat his question, we will endeavour to answer it.

"POST-PARTUM HÆMORRHAGE."

To the Editor of THE LANCET.

SIR,—May I suggest to "C. E. R." that he should, when recording his next wonderful (?) case of midwifery, be less lax in his notes of it. He ought to have informed us (1) how many previous confinements the patient had had; (2) whether he formed his opinion of the great loss at "those times" on the *ipse dixit* of the woman herself (because if he did so, his present case is a valueless one as regards the question of post-partum hæmorrhage); (3) what is meant by "those times"; and (4) whether he seriously thinks that five grains of gallic acid twice a day for three weeks before labour would prevent post-partum hæmorrhage. "C. E. R." has succeeded in describing an ordinary case of labour following the administration of gallic acid. Probably the same happy result would have occurred if he had given his patient the same quantities of bread-pill. The conditions of health, surroundings, &c., differ so materially at different confinements, that it does not necessarily follow because a woman has had flooding before she should have it recur at each labour. In conclusion, let me urge "C. E. R." not to trust to his formula alone, nor to draw conclusions from a single case like the one he gives—a proceeding neither safe nor scientific. Yours faithfully,

September 2nd, 1885. OBSTETRIC.

Bengal.—We should think that our correspondent possesses such a right.

Dr. Wilson.—Sanitary, police, postal, customs.

Nero.—There is no danger.

A CASE OF CONGENITAL DEFORMITY OF THE MALE URETHRA.

To the Editor of THE LANCET.

SIR,—The following case is perhaps of sufficient interest, on account of its peculiarity, to merit insertion in THE LANCET.

About two months ago a little boy of four years of age was brought to me by his father, who mentioned that the child did not pass his urine properly, and that it did not come through the proper exit. The child was in an emaciated state of health, a condition the father attributed to imperfect discharge of his urine. The penis showed the normal urethral aperture at the glans; but about two lines behind this there was a second opening, about the size of, or a little larger than, the former. The father explained that all the urine was voided through this, and that none ever came by the normal orifice. When the child was anæsthetised, it was discovered by the aid of small-sized instruments that the urethra, as terminated in front, passed back for about an inch, and there ended in a cul-de-sac. The hypospadic orifice opened into the urethra, which lay beneath the blind one and passed back into the bladder.

Embryologists may no doubt explain this away as being due to union of apposed parts in the middle as well as at their edges; but, surgically speaking, it must be a rarity.

The treatment which naturally followed consisted in establishing a communication between the two passages, which is the stage thus far attained. An attempt will be made by-and-by to close the abnormal opening by plastic means. I am, Sir, yours truly,

Ton-Pentre, Pontypridd, Aug. 27th, 1885. D. T. RICHARD, M.B.

Mr. Bridgman Smith.—We fail to see that the matter is one with which we are connected.

B. A. H.—Sulphurous acid, hyposulphite of soda, or chlorine water.

J. M. L. is thanked for her letter.

THE CENTENARY OF DIGITALIS.

To the Editor of THE LANCET.

SIR,—Dr. W. Murrell, in THE LANCET of Aug. 29nd, says: "This is the centenary of the introduction into medical practice of digitalis." I have before me Dr. W. Salmon's "Herbal," published 1710, in which digitalis is highly spoken of. On page 309 he gives several preparations: (1) A liquid juice; (2) an essence; (3) a syrup; (4) a decoction or infusion; (5) an ointment or balsam; (6) a cataplasm. He says: "It works strongly both upwards and downwards, and prevails against the scurvy, dropsy, jaundice, gout, and rheumatism." On p. 400, he continues: "I have known it do wonders, and speak here from a long experience. I commend it as a secret, and it ought to be kept as a treasure. These few lines alone are worth ten times the price of the whole book." The book is a quarto, containing 1338 pages, with plates of each plant. Finitur, Dec. 25th, 1708. Digitalis is also mentioned in the "Pharmacopœia Londinensis, or the New London Dispensatory," published in 1702. There is nothing new under the sun!—Yours obediently,

Watford, Aug. 31st, 1885. ALFRED THOMAS BRETT, M.D.

IMPROVEMENTS IN DISPENSARIES.

To the Editor of THE LANCET.

SIR,—Will some of your country readers inform me through your columns of any provincial dispensaries of recent erection which possess all modern improvements and requirements? Being about to erect a new building here, we should like to inspect any such.

I am, Sir, yours faithfully,

REGINALD H. BARKER.

Honorary Secretary, Hull and Sculcoates Dispensary.

Hull, September 2nd, 1885.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—I shall be pleased if some of your readers will give their opinion upon the following point:—A goes to reside in a small town where there is one other resident practitioner (B) and starts a practice. Should A call on B, or B on A? I am, Sir, yours faithfully,

September 2nd, 1885. MEDICUS.

ERRATA.—In Dr. Robt. T. Cooper's Notes on the Deafnesses, published in our last issue, for "obstructive deafness," at the commencement of the fourth paragraph, read "*obstructed* deafness."—In the account of the proposed National Veterinary Association which appeared in our issue of the 15th ult., the paper on Pleuro-pneumonia in Cattle, should have been credited to Professor Walley, and not, as was erroneously done, to Mr. McGillivray.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Althaus, London; Dr. Illingworth, Accrington; Mr. Harrison, Liverpool; Dr. Casey, Windsor; Dr. Brett, Watford; Dr. Churton, Leeds; Dr. Barr, Liverpool; Mr. Sellick, London; Mr. Williams, Shepherd's-bush; Dr. Langmore, London; Mr. Judge, London; Surgeon-General Moore, Bombay; Mr. C. E. Douglas, London; Mr. Haywood, Haydock; Dr. O'Connor, London; Mr. Thistle, Torquay; Mr. Cresswell,

Mickleton; Mr. Woodcock, Wigan; Mr. Smith, London; Dr. Logan, New Orleans; Mr. Paterson, Liverpool; Surgeon W. L. Gubbins, Aldershot; Mr. Richardson, Birkenhead; Mr. Charlton, Brabourne; Miss E. S. Busk, London; Dr. Grabham, Wellington, N.Z.; Dr. Cooper, London; Mr. Cotterell, Bicester; Mr. Lucas, London; Mr. Richard, Pontypridd; Mr. Hunter, Battersea; Mr. Tivy, Clifton; Mr. Neale, Leicester; Mr. Anderson, Bradford; Mr. Smith, Garling; Mr. Hardy, Dulwich; Mr. Thomson, London; Dr. Tatham, Salford; Mr. G. H. Lennard, Hull; Mr. Greenway, Plymouth; Messrs. Jakeman and Co., Hereford; Mr. Lynn, New Charlton; Mr. Fenwick; Mr. Keetley, London; Dr. Mackay, Congleton; Messrs. Maclachlan and Co., Edinburgh; Messrs. Walton and Lee, London; Mr. Mudd, Tunbridge Wells; Mr. Paul, Liverpool; Mr. Johnston, Monaghan; Miss Going, Carlisle; Mr. Braithwaite, Twickenham; Messrs. Oppenheimer and Co., London; Mr. Bowsted; Messrs. Phillips and Co.; Mr. Cooper, Bournemouth; Mr. Townsend, Exeter; Mr. Frampton, Weston-super-Mare; Mr. Potter, Yeovil; Mr. Barker, Hull; Mr. Russell, Glasgow; Mr. Priestley, Ilfracombe; Dr. Atkins, Toronto; Dr. C. T. Williams, London; Messrs. King and Son, London; Mr. Arrowsmith, Bristol; Mr. Pratt, London; Mrs. Rawlins, Westgate; Mr. Stride, Brighton; Dr. Iberle, Thirak; Mr. Waman, Ramsgate; Miss Archer, Edgbaston; Mr. Edwards; Mr. Dowlais, Leicester; Mr. Carter, Glasgow; Mr. Adams, London; Mr. Keating, Manchester; Mr. Barry, Hartlepool; Messrs. E. and S. Livingstone, Edinburgh; Mr. Clark, Doncaster; Mrs. Peel; Mrs. Clark, Liverpool; Mr. Robertson, Sheffield; Mr. Gurner, London; Mr. Godwin, Maidstone; Mr. Davies, Bath; *Dr. Rogers*; Udor; Rejected; Physician; H.; Australian; An "Old Lanceteer"; Out in the Cold; Nero; M.D.; Windsor; A Surgeon-Major, I.M.S.; Fairplay; Poeta; Indian Surgeon; J. H.; Medicus, London; Maltine Company, London; H. H., Manchester; A Resident of Windsor; G. V. P.; Obstetric; D. M.; Medicus; R. N.; Civis Sum; Esperans; Galignani; Scalpel.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Buller; Messrs. Black and Co., Bath; Mr. Masefield; Dr. Spooner, Lower Clapton; Dr. Coombs, Castle Cary; Mr. Marrett, Wisbech; Mrs. Snell, Hertford; Mr. Kershaw, London; Dr. Collins, Braemar; Mr. Davies, Callington; Mr. Davies, Llandrindod; Mr. Barnshaw; Mr. Fraser, Ramsgate; Mr. Nessfield, Manchester; Mr. Jackson; Messrs. Giles and Co.; Mr. Watt, York; Mr. Carmoul, Dumfries; Messrs. Macdona and Co., London; Mr. J. Miller; Dr. Gentles, Derby; Mr. Owen, Russia; Mr. Sumner, Birmingham; Mr. Salmon, London; Mr. Maythorn, Biggleswade; Dr. Thomson, Hemel Hempstead; Mr. Denman, Beaconsfield; Mr. Hoole, Tufnell-park; Mr. J. W. Saunders, Camden-town; Mr. Crasswaller, London; Mr. Nance, Norwich; Mrs. Barker, Hovingham; Dr. Wood, Pontypool; Mr. Sangster, Southsea; Mr. Lea, Kentish-town; Mr. Soulby, Grimsby; Mr. Hickson, Nottingham; Dr. Dawson, Dartmouth; Canterbury; Medicus, Burnley; L.R.C.P., Derby; Cantab., Upper Tooting; Lentus; F. G., Richmond; Medicus; Rex, Birmingham; A. P.; Kappa; J. P. T., Birkenhead; H.; R. F. G., Whitby; Pharmacien, Walton; M. A., Helsby; Æsculapius; K. T., Sheffield; Medicus, Mortimer; Birkley Grange; B. W., Burton-on-Trent; A. B., Ramsgate; E. B. G., Brixton; M. R.; House Surgeon, Truro; Æsculapius, Cullen; Ovum, Finsbury; D. S., Sutherland; G. E. B., Stafford; M.D., Romford; M.D., Manchester; Medicus, Bridgnorth; G. P., Brixton; A. E.; Beta; P. L., Whitechapel; M.D., Camden-town; J. M.; Physician, Hyde; Dr. D.; F. R.; B., Whitechapel; Beta, Livington; M.D., Bayswater; M. S., Bonchurch; Iota, M.D., Bedale.

Liverpool Courier, Hibernia, O. N. P. Review, Tamworth Herald, Sheffield Daily Telegraph, Church of England Temperance Chronicle, Midland Evening News, Manchester Evening News, &c., have been received.

Medical Diary for the ensuing Week.

Monday, September 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.

Tuesday, September 8.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Wednesday, September 9.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, September 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, September 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, September 12.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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